CONTACTS BETWEEN THE BALTIC AND FINNIC LANGUAGES



Contacts between the Baltic and Finnic languages

EDITED BY SANTERI JUNTTILA

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SANTERI JUNTTILA Helsinki

Introduction

Do we know anything Thomsen did not?

Systematic study of early language contacts between the Baltic and Finnic languages was introduced by the famous Danish linguist Vilhelm Thomsen in 1869. He was the first scholar of Finno-Ugrian languages to reconstruct a chronological succession of language contacts based on the phonetic properties and distribution of borrowings. Thomsen's novel method applied the Neogrammarian requirement and relied exclusively on regular sound correspondences. Looking back at his scholarly contribution, he both initiated the systematic research of loanword layers in Finnic and introduced the diachronic dimension to Finno-Ugrian studies in general.

Thomsen pointed out that there are two different layers of Baltic loanwords in the Finnic languages. On one hand, there are numerous Latvian borrowings in Livonian resulting from several centuries of coexistence. On the other hand, there is a prehistoric Baltic stratum covering the Finnic branch as a whole. This earlier layer testifies to a prehistoric change in the geographical distribution of Finnic after this Baltic contact. Thomsen assumed in his *magnum opus* (1890) that the contact between the Finnic and Baltic languages took place before contact between the Indo-Aryan and Finno-Ugrian languages.

After Thomsen, researchers have gradually refined the overall understanding of Baltic loanwords. Today we know that borrowings from Latvian are wide-spread in Estonian and South Estonian as well, although in much smaller quantities than in Livonian. Furthermore, as has been recently argued, the older stratum has a considerably longer history than Thomsen assumed and extends back to the Pre-Baltic Proto-Indo-European period. The oldest Finnic loanword strata were actively studied by the generations following Thomsen, but unlike historical linguistics in more general terms, no breakthrough was made during the Neogrammarian era.

The first significant methodological innovation in linguistics after the Neogrammarian method was the introduction of phonemics and morphophonology by Jan Baudouin de Courtenay, whose ideas were developed further by the Prague school between the World Wars. However, these structuralist ideas did not influence the research of Finnic loanwords before 1970. This delay may be due to the lack of interest in diachronic studies by the pioneers of structuralism. Finally, when the late Professor of Germanic philology Jorma Koivulehto introduced these ideas they caused a revolution in the research of prehistoric language contacts of the Finnic languages. Koivulehto proved convincingly that the contacts between the Finnic and Germanic languages began at least as early as the Finnic-Baltic ones, and both of them were preceded by an even older layer, a West Indo-European stratum of borrowings to early Proto-Finnic or, alternatively, Western Proto-Finno-Ugrian.

Many of Thomsen's main conclusions are still valid. Compared to that which was available during his era, modern linguists have much larger collections of lexical material of not only Finnic and Baltic but especially of the Sámi, Mordvin, and Mari languages at their disposal. Still, the amount of plausible Baltic etymologies in Proto-Finnic has not even doubled since 1890. Thomsen's argument that there are no Proto-Finnic traces in the Baltic lexicon has an even more permanent value, since, so far, no such traces have been plausibly demonstrated; although some have been proposed by several scholars. These proposals are examined in more detail in Santeri Junttila's paper Proto-Finnic loanwords in the Baltic languages? An old hypothesis revisited. The lack of early Finnic loanwords in Proto-Baltic is not a methdologically biased statement, because the phonological structure of the Baltic borrowings in Finnic reveal a source language other than Lithuanian, Latvian, or Proto-Baltic. This prehistoric language with its possible Finnic borrowings seems to have disappeared without descendants.

A Baltic origin has been proposed for several place names in the Finnic-speaking area since Eemil Aukusti Tunkelo did so in 1899.

However, none of these etymologies is convincing, with just one exception. The river name *Koiva*, Latvian *Gauja*, seems to belong to the ancient Baltic loanword layer of Finnic as proposed by **Petri Kallio** under the title *The Baltic and Finnic names of the River Gauja*. This etymology is a remarkable breakthrough, because Gauja is situated at the old frontier zone between the Finnic and Baltic areas, flowing on both sides of the present border of Estonia and Latvia.

Toponymic borrowings in the opposite direction have been quite actively studied during the last decades. The Finnic place names in northern and central Latvia are of a relatively recent origin, though mostly somewhat older than the major part of Latvian loanwords in Livonian. Consequently, they should be connected to the Southern Finnic loanword layer in Latvian discovered by Thomsen. This topic was later revisited by Valdis Zeps (1961). All hypotheses concerning early Finnic traces in the toponymy of Lithuania, East Prussia, and Poland proposed by several Indo-Europeanists are extremely dubious. Contemporary methods of place name studies have been developed later than most of the studies of the subject. An updated review of the material is needed. Considering this problem, Laimute Balode suggests a set of systematic *Criteria for identifying possible Finnicisms in Latvian toponymy* in her paper.

Anthroponymy is a field of study not yet much frequented in research concerning Finnic-Baltic contacts. **Pauls Balodis** presents an overview of *Surnames of Finnic origin in Latvia*. He shows that anthroponymy can reveal interesting facts about ethnic contacts during the latest centuries.

In Thomsen's days, research into contact linguistics was exclusively concentrated on loanwords. This has changed rather slowly. Phonetic, morphological, and syntactic contact-induced phenomena still are more difficult to identify in comparison with loanwords, and the results still emphasize the lexical data. This is well reflected in **Riho Grünthal**'s extensive article *Livonian at the crossroads of language contacts*. Grünthal presents all known contact strata of Livonian, suggesting that only the very intensive Latvian language contact has left noticeable traces beyond the lexical level.

Morphological similarities between the Baltic and Finnic languages were initially noticed by Antoine Meillet (1925: 100–01) and shared syntactic phenomena were pointed out by Jooseppi Julius Mikkola (1930). Both of them assumed a Finnic origin for the Baltic traits, whereas Lauri Posti (1953) suggested Baltic and Germanic superstrate influence behind the main phonological changes in Proto-Finnic. However, since then assumptions of Finnic substrate phenomena in Baltic have been at least as popular as vice versa. **Jan Henrik Holst** examines some of the most frequently proposed Finnic substrate features in Baltic phonology, morphology, and syntax. His paper *On the theory of a Uralic substratum in Baltic* scrutinizes ten assumed substrate features proposed by Witold Mańczak (1990) who has defended the hypothesis of Finnic influence behind the split of Proto-Balto-Slavic into Baltic and Slavic. After Holst's critical assessment, none of these features can be considered as convincing.

During the last quarter of the 20th century, studies on semantic contact phenomena between the Baltic and Finnic languages have gained more popularity, perhaps even more than loanword studies. Research into language typology based on extensive samples from languages around the world have made it possible to critically measure the likeliness of contact influence versus coincidence as reasons behind several syntactic similarities between languages. In principle, it would be logical that there is Baltic syntactic influence in Finnic, because an intensive language contact tends to affect more than just one subsystem of a given language. "A language is much more likely to have undergone either a whole range of contact-induced typological changes in its various subsystems or none" (Thomason 2001: 5). Likewise, there is most likely Finnic syntactic influence in Latvian but not in Lithuanian.

Some of the most noticeable syntactic similarities between Baltic and Finnic, especially between Lithuanian and Finnish, are seen in the use of grammatical cases. Since Karl Kont (1963) these similarities have been considered a probable result of Baltic influence on Finnic. In the present volume, there are two contributions covering most aspects of this question. The case choice of the existential clause subject is studied in **Marja Leinonen**'s paper *Lithuanian partitive genitive and Finnish partitive in existential sentences*. **Maija Tervola**, in turn, discusses the direct object in her paper titled *Comparing object case alternation in Finnish and Lithuanian*. Both studies concentrate on comparisons between the contemporary Finnish and Lithuanian literary languages, but manage to achieve diachronic results. Interestingly, both subsystems are developing in opposite directions in Finnic and Lithuanian, which increases the differences between these languages.

Merlijn De Smit discusses another intriguing syntactic issue, the use of participles in *Agented participles in Baltic and Finnic*. He suggests that the Finnic passive participle suffix *-ttU* could arise under the influence of the similar development of Baltic passive participles characterized by the ending *-to-. He claims that the latter form increases the use of *ttU*-participles in agented passive constructions instead of *-mA*-participles and that this might be connected with a similar functional division between Baltic *-to- and *-mo-participles. The obvious similarity of these suffixes has yielded a question of potential morphological borrowing between Baltic and Finnic. However, the resemblance is probably coincidental, as De Smit concludes, though it may have stimulated the parallel semantic developments in both language families.

The last paper of this volume is a theoretical contribution on possibilities in comparing synchronically unrelated languages, such as Finnish and Lithuanian. **Hélène de Penanros** and **Outi Duvallon** present *Schematic Form as a theoretical tool for the analysis of prepositions, verbal prefixes and cases in Finnish and in Lithuanian.*

As an answer to the initial question we may sum up that we certainly know more than Vilhelm Thomsen did. However, we also have more unsolved questions to bequeath to future researchers than he ever had.

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Proto-Finnic loanwords in the Baltic languages?

An old hypothesis revisited

In the Finnic languages there are at least 200–300 Baltic loanwords, which were borrowed already at the Proto-Finnic stage. There are Baltic loanwords in Mordvin and perhaps Mari as well but these were probably borrowed separately. Even the Saamic languages have old Baltic borrowings, though the amount is about ten times smaller in comparison with Finnic. Prehistoric contact resulted in a relatively intensive lexical influence from Baltic to Finnic whereas no unambiguous Finnic or Uralic loans of similar age have been traced in the Baltic languages. Tens of etymologies evidencing early Uralic influence on Baltic have been proposed, but their status is disputed. The aim of this article is to critically scrutinize the proposed etymologies in order to promote the discussion regarding early contacts between Finnic and Baltic.

The beginning of the research

Numerous lexical similarities between the Baltic and Finnic languages were shown long before there were any serious means to track their origin. The first scholars to describe these connections tended to consider Baltic to be on the receiving end of this influence. Thunmann (1772) believed the Baltic languages were a mixture of Slavic, Gothic, and Finnic. Watson (1822) and Köppen (1829) supported similar views. Rask (1818: 153) was the first to suggest mutual borrowings in which Finnic gained more than Baltic. Ahlqvist wrote a large study (1875) on cultural borrowings, which, according to him, the Finns had received not only from the west and east but also from their southern neighbours. Ahlqvist's insight was new and was fiercely opposed by Anderson, who was convinced of the cultural superiority of the Finns. According to Anderson (1879: 172–73), the fine metallurgy of the Finns was praised in the Nordic sagas and "Finnic Bjarmaland" traded successfully with the Bolgars in the Volga region and the Orient, accumulating enormous treasures, whilst the Lithuanians still paid their taxes to the Russian princes in lime tree bast and bath whisks!

Anderson (1879 and 1893) preferred all explanations to that of Baltic loans in Finnic. The alternatives included loanwords in the opposite direction, parallel borrowings from a third source, and Indo-Uralic kinship. These options were also mentioned by his contemporary Jaunius (manuscript published and commented by Karaliūnas 1972) who, nevertheless, thought that borrowing from Baltic to Finnic explained most cases. Diefenbach (1880: 237) considered borrowing from Baltic as the correct explanation as well but left the door open for Indo-Uralic kinship. Donner (1884) and Veske (1890) proposed both directions of borrowing.

Thomsen (1890: 68–71) concluded on the basis of extensive and thorough etymological research that he could not find any Finnic influence in Baltic, except recent Livonian and Estonian loanwords in Latvian of which a small amount had spread to Samogitian. An example of this kind of a recent loan is Samog. $rij\dot{e} \sim rej\dot{e} \sim reja$ "Scheune" (Thomsen 1890: 276). Thus, Thomsen explained all lexemes shared by Baltic and Finnic as borrowings from the former to the latter, if their zone of distribution includes Lithuanian and Prussian.

This may seem like circular reasoning, but it is not. As a Neogrammarian, Thomsen was able to identify the main sound changes of Finnic and Baltic and notice the recent phonetic shape of the Finnic loans in Latvian and Samogitian. As an Indo-Europeanist, he knew the wider background of most Baltic stems he came across. Moreover, he realized the fallacy of Donner's (1874–88) and Budenz's (1873–79) earlier attempts to explain most Finnic words and derivations from indigenous roots.

From Thomsen's scepticism to Bednarczuk's zeal

Thomsen did not manage to have the last word for long. Several etymologists suggested various Finnic borrowings in Lithuanian and Prussian. These include Lithuanian Samogitianisms such as *gãbalas* 'piece', *laīvas* 'boat', and *bùrė*, *burỹs* 'sail', which Thomsen had misunderstood to be borrowed from Baltic to Finnic. Due to their limited Baltic distribution and recent phonetic properties they still meet his requirements for late loans from Livonian or Estonian through Latvian. However, other Baltic words suggested as Finnic loans have a different distribution and/or phonetics.

Some suggestions were connected with proposed Finno-Ugrian cognates for Finnic words explained by Thomsen as borrowings from Baltic: Lith. *tiltas* 'bridge' \leftarrow Finn. *silta* id. (several incorrect Uralic cognates by Anderson 1893: 199–201), Lith. *putrà* 'porridge' \leftarrow Finn. *puuro*, Karelian *putro* id. (erroneous Mordvin cognate by Paasonen 1896: 27–28), Lith. *kadagỹs* 'juniper' \leftarrow Finn. *kataja* id. (incorrect Permic cognates by Setälä 1909b), Lith. *šēškas* 'polecat' \leftarrow Karelian *häähkä* 'Mustela lutriola' (possible Mari cognate by Wichmann 1911: 253), and Lith. *šikšna* 'belt, leather' \leftarrow Finn. *hihna* 'strap, belt' (false Hungarian cognate by Mägiste 1959: 171).

Other loan etymologies were based on derivational explanations of Finnic words. Lith. *salpà* 'fish trap, backwater' was explained as a replication of Finn. *salpa* 'latch' by Rozwadowski (1913: 67; *Gleichsetzung* already by Leskien 1891: 214) and OPr. *sylecke* 'Baltic herring' from Finn. *silakka* id. by Äimä (1915: 68; Baltic > Finnic by Mikkola 1893: 28). Lith. *kepurė* 'hat' was considered a Finnic borrowing by Mikkola (1930: 442; Baltic > Finnic by Thomsen 1890) who tried to prove the primacy of Finn. *kypärä* 'helmet' by pointing at synonymous *hytyri*.

Mikkola (1925b) explained Lith. *kañklės* ~ *kanklys* ~ *kanklai* 'a zither-like instrument' as a borrowing from Finn. *kannel, kantele* id. and derived the Finnic word from *kanta* 'stem'. This lexical connection had already been explained previously in both ways: Thomsen (1890: 178–81), naturally, considered this a Baltic borrowing in Finnic, whereas Famincyn (1890: 61–68) took the word from Slavic *gosli* through Finnic to Baltic. The same kind of movement of words from Indo-European to Finnic and back was proposed by Ojansuu (1921: 57–60) who sought to explain the similarity between Finn. *sora* 'gravel', Erzya *suro* 'grain', and Lith. *sorà* 'millet'. According to Ojansuu, the Lithuanian word would have been borrowed from Finnic in a time when it still meant 'millet'. Its Mordvin cognate would support reconstructing this earlier meaning, which would have been forgotten once the Finnic peoples had moved too far north to cultivate millet. Ojansuu returned this Finno-Mordvinic stem to an Aryan origin.

Given this background, it was only to be expected that etymologists began to challenge once more the direction of borrowing proposed by Thomsen even in cases where the Finnic word had no other explanation aside from a Baltic loan etymology¹. Sommer (1914: 197) proposed Lith. *jùdrios* ~ *judrà* ~ *idri* ~ *udri* 'Camelina sativa' a Finnic origin (SEst. *judr, judras*, Liv. *ju'ddõrz*, id.), since the irregularity of the stem could suggest a loan origin. Naturally, the same phonetic irregularity might be used as an argument against any origin of great age, a Proto-Finnic loan included.

Kalima (1936) insisted that the direction of borrowing was uncertain in all cases where the Baltic stem lacks IE cognates. He emphasised that there are borrowings of uncertain direction such as Latv. *cimds* 'glove' ~ Finn. *kinnas* id.; Lith. $k\bar{u}l\dot{e}$ 'threshing', *kulės* 'grass from last year' ~ Finn. *kulo* 'forest fire; unmown hay'; Lith. *salà* 'island' ~ Finn. *salo* 'island, forest'; and Lith. *tóšis* 'birch bark' ~ Finn. *tuohi*. The first word is unique in that it does not occur in Baltic outside Latvian but it cannot be explained as a late loan because of its phonetics: Latv. *-md*- must be connected to an older **-mt*- stage before Finn. *-nt*- and Est. *-nd*- found in the stems: Finn *kintaa-*, Est. *kinda-*.

Some other candidates for Proto-Finnic loans in Baltic were proposed by Uralicists looking for Baltic loan etymologies in Finnic. When the IE background of the compared Baltic word seemed uncertain, the researcher would include a minor reservation regarding the direction of borrowing. This is the way words like Lith. *rakandas*

^{1.} In addition, a couple of Finnic loan explanations were suggested without any linguistic arguments whatsoever: Lith. *alùs* 'beer' (Kuhn 1899), Lith. *pirtìs* 'sauna' (Preobraženskij 1910–14: 47 and Knabe 1962: 67), OPr. *sylecke* 'Baltic herring' (Būga 1916: 143) and Lith. *jūra* 'sea' (Schmittlein 1951: 444).

'kitchen utensil' (Ojansuu 1921: 34–35), *mala* 'edge, shore' (Mägiste 1939: 60–69), and *keli* 'how much; a few' (Sammallahti 1998: 242) have received a Finnic loan etymology. Ojansuu (1921: 60–61) even proposed a Finnic origin for a Lithuanian dialect word *šebelka* 'old shabby mare' linking it with Finnish *hepo* 'horse'.

Loja (1958: 103) listed several connections in the Baltic and Finnic lexicon where the direction of borrowing was "unclear". His list included, in addition to some abovementioned stems, Lith. *ešerys* 'perch', *gubà* 'haystack', *kãklas* 'neck', *malka* 'firewood, splinter', *širšė* 'hornet', *vėžỹs* 'crab', *žirgas* 'horse'. All these stems were actually borrowed from Baltic to Finnic, as Kiparsky (1959b) explained in his critique of Loja's work.

Loja's only source was Ariste (1955: 279–80) who had made clear things seem obscure by claiming that the stream of loanwords only seemed unidirectional due to lack of research into Finnic loans in Baltic. In fact, as we can judge from above, attempts to reverse the borrowing direction among the proposed Baltic loanwords in Finnic were not rare at all. Less numerous were novel comparisons where only the direction from Finnic to Baltic was proposed. In addition to Lith. *salpà* mentioned above there were Lith. *palvė* 'coastal lowland' (~ Karelian *palvi* 'dwelling place' by Senn (1936) and Lith. *šãmas* 'wels' (~ Finn. *sampi* 'sturgeon') by Toporov and Trubachev (1962: 247). No other such etymologies were suggested until Bednarczuk found over thirty more of them.

Bednarczuk's article and its impact

Bednarczuk, a Polish linguist, Indo-Europeanist, and historian presented 12 Balto-Slavic, 34 Baltic, and 20 Slavic loan etymologies from Finnic in a single article in Polish (1976) and its shorter Englishlanguage version (1977). The amounts are impressive. Bednarczuk made a real effort in as much inventing new etymologies as in going through the literature and picking out old ones. However, Bednarczuk approved all lexical items that were not unambiguously inherited from PIE, without any criticism. Bednarczuk (1977) introduces his paper in the following way: "The existence of Finno-Ugrian loans in Baltic is an accepted fact; only their scope, number, and character are at issue." This was, in fact, true with one presupposition: the definition "Finno-Ugrian loans" means, or at least includes, recent Estonian and Livonian borrowings in Latvian and Samogitian. But Bednarczuk aimed at sifting out the latter from among the "Finno-Ugrian loans":

"For practical purposes, the occurrence of the word in Lithuanian constitutes proof of the Baltic extent of the loan. For Balto-Finnic loans in Lithuanian, we also have to consider the possibility of Latvian transmission (but not to the exclusion of other alternatives). Here again, phonetic, semantic, areal, and historical considerations may be decisive in determining the direction of borrowing and the source of the word in question."

Here Bednarczuk's major failure is that he does not sort out the words transmitted by Latvian from Livonian and Estonian sources. There is one single source that has provided 4 of his Balto-Slavic and 13 of his Baltic etymologies (i.e. 17 of a total of 46, if we exclude his Slavic etymologies here): Sabaliauskas (1963), who lists both Baltic loans in Finnic and Finnic loans in Baltic. Bednarczuk ignores that Sabaliauskas – and Thomsen before him – defined all the latter as borrowed through Latvian from Livonian or Estonian. This leaves Bednarczuk alone with his "accepted fact".

In addition to listing Latvian and Lithuanian words previously compared with Finnic ones, Bednarczuk sought potential cognates for them in Slavic and Old Prussian to support their interpretation as non-recent Finnic or Uralic borrowings. In the same way, he aimed at proving a Balto-Slavic distribution of several Slavic words that had previously been proposed to have a Finno-Ugrian origin – most often, in an equally uncritical work by Polák (1964).

The discussion regarding possible Finnic and Uralic borrowings has been quite inactive after Bednarczuk. His etymologies have not been critically examined; in fact, they are hardly ever mentioned in Uralicist literature. Scholars of Uralic linguistics tend to support either Thomsen's overall scepticism or Ariste's agnosticism. However, Bednarczuk's Uralic substrate hypothesis has gained support among non-Uralicists. Mańczak (1990) broadened it far beyond the borders of lexicon; this unfounded claim is discussed by Holst in this book. These ideas have been uncritically taken over i.e. by Wiik (2002: 141–142).

To sum up, there are altogether 56 Baltic or Balto-Slavic words proposed as Proto-Finnic or even Finno-Ugrian borrowings, if we exclude both pre-Thomsenian omnicomparativistic etymologies and Ariste's undetailed suggestions. Such a high number of etymologies suggests that in case there really were Proto-Finnic or Uralic (PU) loanwords in Balt(o-Slav)ic, at least some of these are probably to be found among these 56 words. In the next section we will comment all these etymologies and assess briefly their plausibility. All of the 46 etymologies presented by Bednarczuk (1976) are listed according to him; the rest (29, 37, and 46–53) are listed as in the sources mentioned above in the previous chapter. The words of Uralic languages written in the Cyrillic alphabet are cited as written in SSA.

Non-existent loan originals

To prove a loan etymology, the first criterion is the existence of the claimed lexical item in the appropriate chronological phase of the claimed donor language. Secondly, the proposed borrowed item must be formally reconstructed in the proto-language stage of all the languages where it occurs. Finally, the claimed original must phonologically and semantically match the claimed borrowing.

Phonotactically, all the proposed Finnic loan etymologies could originate from Late Proto-Finnic (LPFi). This is nothing unexpected, since the same applies to the vast majority of all Finnic words. However, the language contact resulting in the Baltic loanword layer must be dated no later than the Middle Proto-Finnic (MPFi) stage. A great part of these loanwords were borrowed from a post-PBa stage (Kallio 2008) to MPFi. Thus, borrowings from any post-MPFi stage to PBa or PBa-Sl are chronologically impossible.

The Finnish *i*-stem noun class emerged only after the split of Northern Finnic from the Southern Finnic languages, which is proven by the narrow distribution of *i*-nouns. This excludes the Proto-Finnic origin of the following Baltic *i*- and *ja*-stems:

- 1. Lith. kẽkšis 'poker' ~ Finn. keksi 'boathook'
- Lith. keselỹs 'kind of basket' ~ Finn. kesseli id. Finn. < Sl. (SSA).
- 3. Lith. *liùrbis* 'lout' ~ Finn. *lorppi*, *lorppo*, *lorpus* 'lazy or stupid person' The Finnic words are of descriptive origin, as their meaning suggests (SSA).

While most Finnic *i*-stems are very recent loans, a smaller amount of them are derivations from older two-syllable *e*- and *A*-stems that, as a rule, have a much older origin. Thus, Baltic \bar{e} -, \bar{a} -, and *a*-stems could, in principle, be borrowed from the proto-stems of such Finnic *i*-stems. However, all such cases have other explanations:

- 4. Lith. *kiras* 'little seagull' ~ Finn. *kiiri*, *kirri*, *kirra* id. Both the Baltic and Finnic words for 'seagull' are certainly onomatopoetic.
- Lith. ménké, menkia 'cod' ~ Finn. monni 'wels, loach', Saa. manij? 'whitefish', Md. meńťuk 'burbot', Mari men(gol) id., Hung. menyhal id. – Finn. monni is of late Germanic (Low German) origin (Bentlin 2008: 76–77) and Md. meńťuk a Russian loan (Riho Grünthal, p.c.).
- Lith. šeivà, šaivà 'tube, winding-spool' ~ Finn. käämi, käävi 'spool, feather, the stalk of a quill', Komi, gum 'hollow stem', Udm. gumi id., Khanty kõmo 'water plant in a hollow stem' – Finn. käämi is a Slavic loan and unrelated to the Permic and Khanty words (Posti 1959).

Both Finnic *monni* and *käämi* are impossible to relate to their proposed Finno-Ugrian cognates due to phonological irregularities (SSA).

Finnic U-stems are somewhat older as a noun class. However, U in a middle syllable is not attested in MPFi and, therefore, PBa *angurjas (> Lith. ungurỹs 'eel') has given Finn. ankerias id. (Petri Kallio, p.c.). Three-syllable words in Finnish are either derivations or, rarely, one-morpheme borrowings. Two-syllable words with a three consonant cluster are mostly loanwords and always recent. Thus, the following comparisons are to be removed:

- 7. Lith. pãkulos 'oakum' ~ Finn. pakkula 'polypore, punk'
- 8. Lith. karstas 'grave, coffin' ~ Finn. kirstu 'trunk, coffin'

A Finnic two-syllable *a*-stem cannot be dated PU if it has a long vowel in the first syllable. Most of these words are Baltic or Germanic loans to MPFi. This makes two Balto-Slavic and one Baltic etymology proposed by Bednarczuk very improbable:

- Latv. *joma* 'deep water between two sandbanks', Russ. *jama* 'hole, pit, dell' (all-Slavic) ~ Finn. *juoma* 'stripe; river bed; hol-low' The Latvian word is a recent Southern Finnic loan (Zeps 1962: 114–115). Russ. *jama* is related to Latv. *jāma* 'puddle' (Vasmer 1953–58).
- 10. Latv. *rāja* 'water in a hollow', Kashubian *raja* 'mud', *Raj* in several place names in Poland and East Prussia ~ Finn. *ruoja* 'mud, slime, silt'
- 11. Lith. sỹkas, Latv. sīga 'Coregonus lavaretus' ~ Finn. siika id. Latv. sīga could as well be from Southern Finnic, but not Lith. sỹkas because of k pro g. Bednarczuk tried to strengthen his etymology by pointing to Erzya tuvo, Moksha tuva 'pig'; however, they do not indicate any fish and their cognate in Finnish is sika 'pig' not siika.

In Finnish verbal morphology, the *-Vt*-stem class includes mostly recent derivations. This makes the following comparison hardly plausible:

12. Lith. *žaimotis* 'to make a face, wheedle, indulge; to do mischief; to mock', Latv. *zaimot* 'to slander, mock' ~ Finn. *soimata* 'to reproach' – To fit together Lith. *ž*, Latv. *z*, and Finn. *s* the borrow-

ing should be very early, i.e., Pre-Balto-Slavic, and we should reconstruct a Pre-Finnic **s* instead of **s*, but still the voicing of the Baltic sibilant would remain without explanation. A recent borrowing Southern Finnic \rightarrow Latvian \rightarrow Lithuanian would be somewhat more plausible. However, even this is phonetically problematic, and a better explanation for the Ba. word is given by Smoczyński (2008: 144): **žaimā*- < **žaid-mā*- cf. Lith. *žaisti* 'to play'. Thus, there is no reason to assume contact with Finnic.

The following comparisons fail since the proposed Finnic loan originals are loans from a source more recent than Proto-Baltic. All these Finnic words happen to be borrowed from a Germanic language:

- 13. Lith. bùrė, burỹs 'sail', Latv. bura ~ Finn. purje id.
- 14. OPr. *sylecke*, Lith. *silkė*, Latv. *silke* 'herring, Clupea harengus' ~ Finn. *silakka* id.
- 15. Lith. *sel(i)avà*, *seli(o)va*, *selẽva*, Latv. *seļava*, *siļava*, Pol. *sielawa* (all-Slavic) 'vendace, Coregonus albula' ~ Finn. *silakka* 'herring, Clupea harengus; salted fish'
- 16. Lith. *salpas*, *salpà* 'bay', OSl *slapъ*, 'wave, whirl' ~ Finn. *salpa* 'latch'

In examples (13–16), the latest loans (14–15) descend from Scandinavian. The Baltic words in (14) are certainly from the same direction (cf. Smoczyński 2007 s.v. *silkė*), whereas in (15) the Baltic words have certainly been borrowed from Slavic. (13) and (16) are older Germanic loans. (13) has been borrowed from Southern Finnic through Latvian into Samogitian, whence it has entered literary Lithuanian. (16) is an inherited stem in Balto-Slavic (cf. Smoczyński 2007) and its semantics are quite different from the Finnic word, though Bednarczuk (1976) connects them with secondary Baltic and Slavic meanings 'fish trap' and 'fish pond' (cf. SSA for the sources and research history of all the Finnish words). Some Balt(o-Slav)ic stems have also been claimed as having a non-Finnic Uralic loan origin by Bednarczuk:

- 17. Latv. paskani, pastenāji, Lith. pleiskanės, Polish płoskoń, Czech poskonné, etc. (all-Slavic) 'male cannabis' ~ MariE pačaš id., cf. Komi, Udm. piš 'male cannabis' This must be < PBa-Sl *paskan- or *plaskan-. Bednarczuk (1976: 44) excludes the later form and combines the first part of *pas-kan with Mari pačaš. However, neither Mari č nor Permic š (< Proto-Permic *č by Lytkin-Gul'aev 1970: 238, both < PUr *č) can give PBaSl *s.</p>
- 18. Lith. giñtaras, OPr. gentars 'amber' ~ PFU, cf. Hungarian gyanta id., Mari jamdar 'glass; clean, transparent' – This comparison is impossible in many ways beginning with the initial consonant. If a PU form could be reconstructed from the Mari and Hungarian words (in fact, it cannot), it should have *j- which does not give PBa *g-. Cf. Holst's article in this volume.
- Lith. vãris, OPr. wargien 'copper' ~ MariW würyene E wərgeńə, Udm. *irgon*, Komi *irgen* id. – In this case, it is impossible to reconstruct a common proto-form for the Finno-Ugrian words, and none of them could result in the Baltic forms, which all lack -g-. Note that OPr wargien is to be read as [varjen] (Viitso 2012: 192).
- 20. Lith. lopšýs 'cradle' ~ MariW lüpš E lepš id., cf. Erzya lavś, Moksha lavks, and their cognates in Samoyed – Phonologically, it would be somewhat problematic but not wholly impossible to combine a Pre-BaSl *lāpś-ija- with PU *lapśi. Nevertheless, Lith. lopšýs is earlier attested as lopišýs, a form not derivable from Pre-BaSl *lāpś- but explainable as a derivation from lõpas 'patch, rag' (Smoczyński 2007).
- 21. Lith. šermuõ, šarmuõ 'ermine' ~ MariW sôrmô E šurmaņše 'lynx', cf. Skolt čõr'mâ 'wolf', Udm. śor, Komi śer 'marten', Nenets salmik 'sable' (Collinder 1955: 8; transcription unchanged) A Proto-Mari form would have to be reconstructed as *šŭrm-

and the PUr. form as **śurmi*, neither of which match in vocalism with PBa **šerm-*. Lith. *šermuõ*, *šarmuõ* is a regular stem cognate of German *Hermelin* 'ermine'. (Smoczyński 2007)

22. Lith. sóra, Latv. sāre 'millet' ~ Erzya śuro, Moksha śoră 'grain', Mari šürö 'soup', Udm. zer 'Bromus secalinus', Komi zer 'oat', Nenets *śora* 'seed of a coniferous tree' – The Uralic group does not hold together, since the Permic forms are impossible to combine with the others because of the initial consonant. Instead, they could be related to Erzya suro, Moksha sură 'millet' as suggested by Toivonen (1928: 133). These Mordvin words have also been considered borrowings from the Baltic stems mentioned here, but Pareren (2008: 124) states that the incompatibility in the vocalism (PBa. $*\bar{a}$ to Md. u) makes a borrowing in both directions impossible. The same applies, of course, to the relation of PBa. *ā to Finn. o in sora 'gravel', a possible cognate of this group. The other Finnish words mentioned by Bednarczuk (1976: 53) do not belong here: Finn. suurus 'thickening (for a soup or sauce), breakfast' is connected to suuri 'great' and sara 'Carex' is a Germanic loan (cf. SSA).

Non-existent Proto-Baltic forms

In this section we will critically assess the remaining Baltic and Slavic material to see if the stems proposed could be reconstructed in PBaSI. Those showing aphonological evidence for recent contact must be explained as borrowings within the language family. In the case of an East Baltic distribution including both Latvian and Lithuanian, it is then logically easier to suppose a widely attested borrowing direction Southern Finnic \rightarrow Latvian \rightarrow Lithuanian than a hypothetical Proto-Finnic \rightarrow Lithuanian \rightarrow Latvian.

Bednarczuk (1977: 99) wrote "For Balto-Finnic loans in Lithuanian, we also have to consider the possibility of Latvian transmission", but he did not even try to provide potential examples of such transmission. For example, he could have weeded out all stems with Latvian word-initial k, which excludes a dating older than one millennium:

- 23. Lith. kildà 'quarrel, game'; Latv. kilda id. ~ Liv. Est. kild 'chip'
- 24. Lith. kilkė, Latv. kilka 'sprat, Sprattus sprattus' ~ Finn. kilo id.
- 25. Lith. kipis, Latv. kipis 'bucket' ~ Finn. kippa, kippo 'scoop'
- 26. OPr. kaywe 'mare', Lith. kèvė 'jade (horse)', Latv. kēve 'mare', kaive 'horse' ~ Liv. kēv id. Latv. kēve is surely a Livonian loan. Latv. kaive and OPr. kaywe may be older but phonetically they cannot be connected to the Livonian word or its Proto-Finnic reconstruction *kēvi.

The following comparison does not work, because the stress patterns point to a late inter-Baltic borrowing:

Lith. *laĩvas*, obs. *laivà* 'ship', Latv. *laĩva* 'boat' ~ Finn. *laiva* 'ship' – If the Latvian form were inherited, its Lithuanian cognate should be ***láiva*. The Lithuanian word in question is borrowed through Latvian from Southern Finnic, as mentioned above.

In one case it is phonetically impossible to reconstruct a PBa form, not to mention a PBaSl one, since all the words are obviously onomatopoetic:

28. Lith. *káiva, kaja*, Latv. *kaija, kaiva* 'sea-gull', Pol. *czajka* (all-Slavic) ~ Finn. *kaija, kajakka, kajava* id.

One word has a very limited dialectal distribution in Lithuanian, implying a later loan origin:

29. Lith. *šebelka* 'old shabby mare'~ Finn. *hepo* 'horse'. Most probably, the Lith. word is a loan from German *schäbig* 'shabby'.

Phonetic and semantic mismatches

Let us now try to reconstruct the Proto-Balt(o-Slav)ic and Middle Proto-Finnic shapes of the remaining compared lexemes. A complete reconstruction is not needed for all stems, since phonological details let us judge the correctness of the given comparison. Recalling that Fi. h <MPFi. **š* suffices to refute the following three untenable comparisons:

- 30. Lith. asiai 'Equisetum' ~ Finn. hosia id.
- 31. Lith. *buojis* 'bottom, hole, swamp' ~ Finn. *pohja* 'bottom'
- 32. Lith. *duolis* 'hornless cow' ~ Est. *tohl* 'hollow of a horn'

There are no traces of the MPFi sibilant in any of these Lithuanian lexemes. They are all connected with the given Finnish words by a late loan from Southern Finnic through Latvian.

The following comparisons encounter other phonological problems:

- 33. Latv. kukainis 'insect', Pol. kuka 'pain, suffering; louse' (all-Slavic) ~ Liv. kukki 'insect, larva', SEst. kuklane 'Formica' Latvian kukainis is surely a late Southern Finnic loan, whereas the Slavic word is most probably from nanny language. They are not comparable with the MPFi form *kutki- where kk < *tk is proven by the cognates in Saami (N gotka), Mordvin (Erzya kotkudav), and Mari (kutko) all meaning 'ant' (EES).</p>
- 34. Latv. *leste* 'flounder, Platichthys flesus', Russ. *lešč*' 'bream, Cyprinus brama' (all-Slavic) ~ Liv. *lieštà*, Est. *lest* id. – Possible MPFi. forms should be **lesta* ~ **lestä*, which cannot originate from a Slavic soft stem. Latv. *leste* is certainly a late borrowing from Southern Finnic, which, in turn, may be a Slavic loan.
- 35. Lith. *šãmas*, Pol. *sum* 'wels, Silurus glanis' (all-Slavic) ~ Finn. *sampi* 'sturgeon, Acipenser sturio', Mari *šamba* 'burbot, Lota lota', Mns. *šupu* 'sturgeon', Hung. *compó* 'tench, Tinca tinca'

- This comparison was found untenable by Kiparsky (1963: 431), since the Ba-SI forms lack FU *p; Hungarian *compó* is not related to the rest of the FU forms either, because PFU *mp is manifested as -bb- in Hungarian.

- 36. OPr. warnia, warne, Lith. várna, vañnas, OSl. vorna 'Corvus cornix, crow' ~ Finn. varis, Est. vares, NSaa. vuoražas, Erzya varaka, varšej, WMns. urin, NKha. wărŋa, Hung. varjú, Nenets warŋäe id. All these words are onomatopoetic just as most bird names. The Uralic forms are originally a trisyllabic derivation *varVC(C)V, i.e. PFi. *variksi from an onomatopoetic stem *vari-, but the PBaSl form is bisyllabic *varnā.
- 37. Lith. *keli*, kělios 'how many', Old Slavic *kolb* id. ~ Finn. *kyllä* 'enough; yes', NSaa. *galle* (Sammallahti 1998: 242). The vowels do not match in both the first and second syllables. The Ba-Sl word may be related to Latin *quālis* 'what (kind)' (Smoczyński 2007).

Three further cases are semantically problematic:

- 38. Lith. salutė, Latv. salate 'asp, Leuciscus aspius' ~ Finn. salakka 'bleak, Alburnus alburnus' – Asp and bleak are very different fish. Leuciscus aspius can grow up to 12 kg in weight, whereas Alburnus alburnus rarely reaches 40 g. It would be odd to name a great catch after a small tiddler used by fishermen mostly as a bait. The suffixes do not match either.
- 39. OPr. palwe (in place names), Lith. palve 'coastal lowland; ripe cloudberry, Rubus chamaemorus' ~ Karelian palvi 'dwelling place', Est. palu 'clearing, brushwood', Mns păwl, Hung. falu 'village' The Estonian word must be separated as a simple derivative of pala- 'to burn', cf. Finnish palo. Furthermore, the semantic distinction is decisive. The meanings 'village' and 'coastal lowland' are distant. At least the berry name must be connected with the colour name palvas 'fawn, pale yellow'.

40. Lith. *kurnéti* 'to lament' ~ Finn. *kurnata* 'to croak', *kurnia* 'to rumble', Erzya *śulot guŕńit*' 'intestines rumble' – It is hard to track any mutual influence due to the onomatopoetic character of the words.

From Baltic to Finnic, vice versa or parallel borrowings from a third source?

After having excluded 40 clearly erroneous word comparisons, there remain 16 cases, where both phonetics and semantics suggest a common origin of Baltic and Finnic words. If we exclude the possibility of coincidence and Indo-Uralic speculations, three possibilities remain: a borrowing from one group to the other or parallel borrowings from elsewhere.

In such cases, the distribution of a given word in both the Uralic and Indo-European languages is decisive. Finnic words that have cognates east of Mordvin and Mari should at least not be considered Baltic borrowings. Likewise, Balto-Slavic stems with IE cognates cannot be claimed as having a Finnic origin.

However, there are some words that should be considered potential borrowings from Finnic or Uralic to Baltic. The following three Finnic words, for instance, have cognates in Eastern Uralic languages and are attested in the Baltic languages as well:

OPr. kadegis, Lith. kadagỹs, Latv. kadiķis, dial. kadags 'juniper' ~ Finn. kataja, Est. kadakas, NSaa. gaskkas, Mari lümegož, Komi kač-pomel', Mns. kɛɛšepiw id. – This parallel is only superfluous and fails for several reasons, because neither the Baltic nor the Uralic forms can be direct descendants of a single protoform. On the Baltic side, Latv. kadiķis is certainly a borrowing from Baltic German Kaddik, which in turn may be borrowed from OPr. kadegis. The distribution of Lith. kadagỹs, Latv. dial. kadags is not all-Baltic but attested only in West Baltic and in western dialects of Lithuanian/Samogitian and Latvian (BVA – BKA 2009: 74–77) where it may be a West Baltic substrate word. This already makes a Finnic loan origin quite unlikely.

An even more important obstacle is the mismatch of the Uralic words (Linde 2001): it is not possible to reconstruct a proto-form between any of the two forms. Moreover, Mari *-gož* and Komi $ka\ddot{c}$ - do not even carry the meaning 'juniper'. Only when giving up the non-Finnic cognates is it possible to reconstruct MPFi. *kata-ka, which is combinable with the Baltic forms.

- 42. Lith. *šùkos*, Latv. *suka* 'comb, brush' ~ Finn. *suka* id., N Saa. *čohkut* 'to comb', Erzya *śuva* 'husk', Mari *šu* 'husk; bristle', Komi *śu* 'rye; grain' – This case has been ingeniously solved by Kallio (2009: 32) who demonstrates the Finnic and Saami forms are Pre-Baltic loans, whereas the semantically diverging Mordvin, Mari, and Permic words originate from Proto-Aryan **ćūka-* 'awn, sting, needle', a cognate of the Baltic forms with a different apophony. The Aryan word has a simple form and meaning whereas the Baltic word has collective form and collective meaning, and this divergence is reflected in the semantics of the two parallel borrowings into Uralic.
- 43. Lith. šēškas 'polecat, Mustela putorius' ~ Finn. dial. häähkä, Veps hähk 'id., Mustela lutreola', Mari šaške id., Selkup tööte, *töut*, Kamas $\dot{c}a'$ 'Lutra lutra' – This is by far the most plausible possible Finnic or Uralic borrowing in the Baltic languages. The sound correspondences between the Uralic words are flawless and the semantics are clear. Mari šaške has also been borrowed to Chuvash (šiške 'Mustela lutreola') and Tatar (Bashkir şäşke id.) as suggested by Wichmann (1911: 253), if the direction of borrowing is not the opposite. On this basis, the Finnic word is not as clearly a Baltic loan as previously thought (i.e. Junttila 2012: 268). However, there are no less then three possible Baltic derivational explanations for Lith. šeškas: it may be connected with Lith. šikti 'to shit' (Būga 1908: 64; bad smell is characteristic for Mustela putorius), Lith. šéšti 'to be angry, to cavil, to carp' (Karaliūnas 1970: 209–10), or Latv. šekšķēt 'to get dirty' (Endzelīns 1927-29: 820).

Two Finnic stems have been suggested to extend up to Mari:

- 44. Lith. *šikšnà*, Latv. *siksna* 'belt, leather' ~ Finn. *hihna*, Erzya *kšna*, Mari *šüštö* 'strap, belt' Grünthal (2012: 318) has pointed out that the Finnic, Mordvin, and Mari forms cannot be traced to a common proto-form due to significant differences in the first syllable vocalism. Grünthal proposed parallel borrowings from Baltic to both Finnic and Mordvin.
- 45. Lith. *jáura* 'marsh, peatsoil'; OPr. *iūrin*, Lith. *jūra*, Latv. *jūra* 'sea' ~ Finn. *järvi*, NSaa. *jávri*, Erzya *eŕke*, Moksha *jäŕkä*, Mari *jer* 'lake' These Uralic forms fit well together, if NSaa. *jávri* is metathetic and Erzya *-ke*, Moksha *-kä* is the common diminutive suffix of Mordvin. The proto-form must be **järwä* which is unproblematic to explain as a borrowing from PBa. **jaurā*, since there were no diphtongs in PUr. until they arose in MPFi. The opposite direction of borrowing is, however, not plausible, since *rw* ~ *rv* has occurred in all phases from PIE to Modern Baltic; thus, a PBa. **jarvā* or **jervā* would be expected instead of **jaurā*². The Baltic forms have a credible IE explanation, cf. Smoczyński 2007 s.v. *jūra*.

The distribution of the remaining eleven Finnic stems is restricted to Mordvin (two stems), Saami (one stem), or to only Finnic languages (seven stems). As such, they do not constitute an argument in favour of the hypothesis of Proto-Finnic borrowings into Balto-Slavic, but can be most plausibly explained in the opposite direction. In cases where no IE cognates can be shown, a possible unknown source remains open: parallel substrate loans from a vanished source would be the most credible option.

^{2.} Toponymic material from northern Russia seems to include an element identifiable as **jahr-* or **jagr-*, which would yield a PUr. **jäkrä* 'lake' (Saarikivi 2004: 202). However, it is not unproblematic to combine this form with the Uralic words mentioned here, even when giving up their Baltic etymology; and in any case it is not possible to attribute these as the source of Lith. *jáura*.

- 46. Lith. *malà*, Latv. *mala* 'edge, shore' ~ Finn. *malo* 'brow, edge; crack; bay, shore', Erzya *mala-* 'near'. Fraenkel (1955–65) suggests Albanian, Icelandic, and Irish cognates for the Baltic stem.
- 47. Lith. *putrà*, Latv. *putra* 'porridge' ~ Finn. *puuro*, Karelian *putro* id., Moksha *pətra* 'murky'. The Baltic words are derived from Lith. *pùsti* 'to swell, puff up' (Fraenkel 1955–65)
- 48. Latv. cimds 'glove' ~ Finn. kinnas, Lule Saa. kamtes id.
- 49. Lith. *kañklės* ~ *kanklys* ~ *kanklai* 'a zither-like instrument' ~ Finn. *kannel, kantele* id. The Baltic word has been connected with Latin *canere* 'to sing' etc. (Fraenkel 1955–65)
- 50. Lith. *kepurė* 'hat', Latv. *cepure*, Pol. *czepiec* ~ Finn. *kypärä* 'helmet'. Smoczyński (2007) derives the BaSl word from either one of two homonymous PIE roots *(*s*)*kep*-.
- 51. Lith. *rakandas* 'kitchen utensil' ~ Finn. *rainta* 'milking vessel'. Fraenkel (1955–65) derives the Lith. word from *rankà* 'hand'; this explanation requires a sporadic loss of *n* through dissimilation.
- 52. Lith. *tiltas*, Latv. *tilts* 'bridge' ~ Finn. *silta* id.³ Smoczyński (2007) derives the Baltic word from PIE * $telh_2$ 'lift, carry, bear', cf. Latin (*t*)*lātus* 'carried'
- 53. Lith. jùdrios ~ judrà ~ idri ~ udri, Latv. judras 'Camelina sativa' ~ SEst. judr, judras, Liv. ju'ddõrz id. The distribution on the Finnic side is limited to the two southernmost languages with the consonant cluster being typical for loanwords. The Baltic word may be a connecter with Germanic *duđra-, cf. Junttila 2012: 273.

- 54. Lith. $k\tilde{u}$ lės 'threshing', Latv. $k\bar{u}la$ 'grass from last year' ~ Finn. kulo 'forest fire; unmown hay'. Smoczyński (2007 s.v. kulti) derives the Baltic word from kùlti 'to whack, thresh'.
- 55. Lith. salà, Latv. sala 'island' ~ Finn. salo 'wooded island, forest region, wilderness'. There are several etymologies, though hardly a single semantically convincing one, cf. Fraenkel 1955– 65 s.v. sala¹, Smoczyński 2007 s.v. sala II. A similar element is met in place names in the Baltic Sea region and further north on the coast of the Arctic Ocean. It has been mentioned as a possible substrate word from an extinct language by Aikio (2004: 24).
- 56. Lith. *tóšis*, Latv. *tāss* 'birch bark' ~ Finn. *tuohi* id. The Baltic noun is derived from the Latv. verb *tāst* 'to make smooth, to peel', cf. *aptāstīt* 'to peel (bark) off'(Fraenkel 1955–65).

Conclusions

Analysing 56 proposed Finnic or older Uralic loanword etymologies of Proto-Baltic or Proto-Balto-Slavic results in rejecting 29 stems as nonexistent in either of the proto-languages and 11 stem comparisons as phonologically or semantically impossible. The remaining 16 etymologies include 12 purely Finnic or Finno-Saamic and two Finno-Mordvin stems, with only two stems, Finn. *järvi* and *häähkä*, extending up to Mari. Ten Baltic stems have an acceptable alternative etymology preferable to the Finnic loan explanation.

The Baltic words remaining without a convincing explanation are Lith. *kadagỹs*, *salà*, *šẽškas*, *šikšnà*, and Latv. *cimds*. None of these has certain cognates in Slavic and only *kadagỹs* has a cognate in West Baltic. The only case where a lack of an unambiguous explanation for the Baltic word meets a possible wide distribution on the Uralic side is Lith. *šẽškas* ~ Finn. dial. *häähkä*. This form requires further etymological study. If a Finnic or Uralic origin for *šẽškas* is to be rejected, it will be convenient to explain all five of these stems as either Baltic borrowings in Finnic or parallel borrowings from a shared source, perhaps a lost substrate language.

^{3.} The Uralic connections for *silta* proposed by Anderson (1893: 199–201) are purely coincidental and thus not worth even mentioning here.

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Tiivistelmä

Santeri Junttila

Itämerensuomalaisissa kielissä on tunnetusti ainakin 200–300 kantasuomen aikaista lainasanaa balttilaisista kielistä. Myös balttilaisesta kielikunnasta on etsitty iältään vastaavia itämerensuomalaisia tai laajemmin uralilaisia lainoja. Artikkeli käsittelee kriittisesti esitettyjä 56 uralilaista lainaetymologiaa, jotka osoittautuvat riittämättömästi perustelluiksi. Vain liettuan *šeškas*, latvian *sesks*-sanaa on syytä tutkia edelleen mahdollisena uralilaisena lainana, mutta siltäkään ei puutu vaihtoehtoisia selityksiä.

Kopsavilkums

Santeri Junttila

Ir zināms, ka Baltijas jūras somugru valodās sastopami vismaz 200 – 300 baltu valodu aizguvumu, kas aizgūti jau somu pirmvalodas laikā. Arī baltu valodās ir tikuši meklēti vecumā atbilstoši Baltijas jūras somugru vai, vispārīgāk runājot, urālu valodu aizguvumi. Rakstā kritiski iztirzātas 56 urālu aizguvumu etimoloģijas, kas izrādījās nepietiekami pamatotas. Vienīgais vārds, ko būtu vērts turpināt pētīt kā iespējamu urālu valodu aizguvumu, ir lietuviešu valodas 'šeskas', kas atbilst vārdam 'sesks' latviešu valodā, un pat šim vārdam pastāv alternatīvi skaidrojumi.

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The Baltic and Finnic Names of the River Gauja¹

Recently Jorma Koivulehto suggested the following loan etymology which, however, seems to have gone more or less unnoticed, since he only did so in a footnote of an article in Finnish on something completely else (1986: 170):

(South) Estonian *Koiva jõgi* 'the river Gauja in northern Latvia' < Late Proto-Finnic **koiva* < Middle Proto-Finnic **kojwa* ← Proto-Baltic **gaujā* > Latvian *Gaũja*, Lithuanian *Gáuja* 'id.; also a Neman tributary in southern Lithuania and western Belarus'.

Phonologically the loan etymology is flawless, because the substitution $*a \rightarrow *o$ is well-attested elsewhere (Kalima 1936: 65):

- Finnish *lohi*, Estonian *lõhi* 'salmon' < Late Proto-Finnic **lohi* < Middle Proto-Finnic **loši* ← Proto-Baltic **lašis* > Latvian *lasis*, Lithuanian *lãšis* 'id.'.
- So is the postvocalic metathesis $*uj \rightarrow *jw$ (Koivulehto 1970: 179–181):

Finnish *laiva*, Estonian *laev* 'ship' < Late Proto-Finnic **laiva* < Middle Proto-Finnic **lajwa* ← Proto-Germanic **flauja*- > Old Norse *fley* 'id.'.²

Remarkably, the metathetic substitution also suggests that Finnic *koiva was borrowed as early as the Middle Proto-Finnic period roughly dating from 500 BC to 200 AD (Kallio 2012: 233). Thus, it contradicts the idea that the Latvian Gauja would have been named after the Lithuanian Gauja, from where the East Baltic speakers would have arrived much more recently (Buga 1961: 544). Even so, Finnic *koiva has no better etymology either (see Faster forthcoming for more detailed discussion), since the earlier suggested derivation from Finnic *koivu 'birch' (Bielenstein 1892: 48) is anything but convincing. First, while (South) Estonian $k \tilde{o} i v$ 'birch' shows the illabialization $*o > *\ddot{e}$, (South) Estonian Koiva jõgi does not. And second, the Finnic and Baltic names of the Latvian Gauja are so similar that any etymology explaining their similarity should be prioritized over those regarding it as a sheer coincidence. As a matter of fact, Koivulehto's loan etymology is the only one plausibly connecting Finnic *koiva with Baltic *gaujā, since the reverse borrowing direction from Finnic to Baltic is made very unlikely by the fact that there has been no postvocalic metathesis $*iw \rightarrow *ui$ on the Baltic side, not to mention that this theory would also leave the Lithuanian Gauja unexplained.

To sum up, Finnic **koiva* was most likely borrowed from Baltic **gaujā*, which might very well have happened during the second century AD when typical *tarand*-graves spread from coastal Estonia to inland Estonia as well as northern Latvia (Lang 2007: 191–203). As noted above, at least the metathetic substitution makes a later date unlikely, whereas an earlier date is in theory possible, because Baltic **gaujā* could go back to Balto-Slavic **gouiaH*, whose shape would phonologically be even closer to Finnic **koiva*. However, as the Finnic toponyms in northern Latvia nearly always point to either Estonian

^{1.} I would like to thank Mariko Faster, Santeri Junttila as well as Ranko Matasović for kindly providing me with extra references.

^{2.} As Latvian *laĩva* 'boat' and Lithuanian *laĩvas* 'ship' are well-known borrowings from Finnic **laiva*, it makes no sense to derive Finnic **laiva* from Baltic **plauja-*, an alleged but unattested cognate of Germanic **flauja-* (Liukkonen 1999: 34), but postulating such ghost sources must be condemned as circular reasoning *par excellence.*

or Livonian (see Balode & Bušs 2007 and the cited literature), Finnic looks like a recent superstrate rather than an ancient substrate, thus supporting the theory that the earliest Finnic expansion to northern Latvia dates no earlier than the second century AD. Before this Finnic southward expansion, the Baltic speaking area extended much further to the north, as evidenced by the words borrowed into Middle Proto-Finnic from North Baltic, that is, my proposed label for this otherwise unattested Baltic dialect (Kallio 2008). Indeed, it is even possible that it was Proto-Finnic that had a Baltic substrate rather than vice versa (cf. Holst in this volume).

While the idea of a (North) Baltic substrate in Finnic can also be supported by archaeology (see now Parpola 2012: 133), Santeri Junttila (2012: 265) has correctly pointed out that there is no toponymic evidence of the earlier Baltic presence anywhere north of today's Latvia (see the map in Zinkevičius 1996: 12).³ This fact is even more important considering the clear toponymic evidence of the earlier Finnic presence in northern Latvia (see the map in Rahkonen 2013: 32). However, we must also remember the time depth, because quite a percentage of toponyms can disappear within a generation (see e.g. Ainiala 2001). As the language shift from Estonian and Livonian to Latvian has largely taken place over the past few centuries and even decades, it is no wonder at all that there are still lots of toponyms left. Instead, the language shift from North Baltic to Proto-Finnic had already occurred by the first centuries AD, judging from the fact that no North Baltic words were borrowed after the Middle Proto-Finnic stage. Thus, we cannot even expect to find too many Baltic toponyms but, at most, only a few Baltic macrohydronyms.

Now speaking of Baltic macrohydronyms, Latvian *Gaũja* definitely fulfills the requirements (Bušs 2003: 27–29), and there is no reason for separating it from Lithuanian *Gáuja* (Vanagas 1981: 108–109). No doubt the most detailed recent discussion of their etymology was provided by the late Wolfgang P. Schmid (1998: 148–151).

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After rejecting the direct derivations from Lithuanian *gaujà* 'crowd' (Endzelīns 1956: 303–304) and Latvian *gùovs* 'cow' (Būga 1961: 852), he reminded us that Baltic toponymy would also seem to include zero-grade and lengthened-grade derivatives from the same root **gau*-, which he then rather cautiously compared with the Indo-European root **gheu*- 'to pour' (> Greek $\chi \acute{e}\omega$ 'id.', Tocharian *ku*- 'id.', Sanskrit *hu*- 'id., to sacrifice'; LIV 179–180), hence implicitly suggesting the following etymology (cf. also Karaliūnas 2004: 172):

Latvian *Gaũja*, Lithuanian *Gáuja* < Proto-Baltic * $gauj\bar{a}$ < Proto-Balto-Slavic *gouiaH < Proto-Indo-European * \acute{g}^hou -*iH*- eh_2 'pouring one'.

The reason for Schmid's cautiousness was the unexpected centum reflex *g instead of the expected satam reflex *ž, even though there are dozens of similar instances in Balto-Slavic. Most were due to conditioned sound changes and subsequent analogical levellings (Kortlandt 1978; Matasović 2005), but some can also be taken for borrowings from neighbouring *centum* languages, such as Germanic (Kiparsky 1934: 101-108). At last, we cannot exclude an unknown centum substrate in Balto-Slavic (Andersen 2003: 54-58, 2009: 24-25),⁴ something that would even be strengthened by hydronymic evidence because hydronyms, if any, are the most typical substrate words. As a matter of fact, some authorities (e.g. Pokorny 1959: 448) believe that Baltic would have even further centum derivatives from Indo-European *gheu-, such as Lithuanian gausus 'abundant' and Latvian gauss 'slow', which can, however, also be etymologized otherwise (see Fraenkel 1955: 141-142; Karulis 1992: 296). In any case, there are several hydronyms derived from the same root in other Indo-European

^{3.} True, it has been argued that there could be Baltic toponyms even in Finland, such as *Kalanti* and *Köyliö* (cf. Old Prussian *Galindo* and Old Curonian *Ceclis*; Liukkonen 1999: 11), both of whose shapes, however, point to the Late Proto-Finnic stage at the earliest. Thus, they must be rejected for being more recent than any of over 200 generally accepted Baltic loanwords in Finnish.

^{4.} A *centum* substrate has also been reinterpreted as a pre-*satəm* substrate which would still have had palatal stops at the time when *satəm*-assibilation had already taken place in Balto-Slavic, thus leading to the substitution of the pre-*satəm* palatal stops by the Balto-Slavic velar stops (Andersen 2003: 57). While there is nothing wrong with the idea of more conservative pre-*satəm* dialects coexisting with more innovative *satəm* dialects, I remain sceptical of the substitution itself, because the Indo-European palatal stops never seem to have been replaced by the Uralic velar stops but only by the Uralic palatal affricates and sibilants (Koivulehto 1983: 111–120, 1999: 231–238).

branches, such as Old Norse *Gautelfr* > Swedish *Göta älv* (Svennung 1967: 66–78).⁵

If we accept Schmid's etymology for Baltic *gaujā, there are no more reasons to think that the Latvian Gauja would have been named after the Lithuanian Gauja or vice versa, because their naming motivation is typologically so unmarked that they were more likely named independently. On the other hand, if Latvian Gaũja and Lithuanian Gáuja were indeed borrowed from a centum substrate, their naming process can have taken place quite soon after the Indo-Europeanization of the Baltic Sea region during the third millennium BC (cf. Mallory 1989: 243-257; Anthony 2007: 367-368; Parpola 2012: 129-130). Yet the proposal by Schmid himself that the names could have been borrowed from an omnipresent Proto-Indo-European dialect called Old European can hardly be taken seriously (cf. Bichlmeier 2012, 2013), but the most likely source was an archaic centum dialect whose speakers eventually shifted to Balto-Slavic. Perhaps the same dialect was also the source of the so-called Pre-Germanic loanwords in Finnic and Saami, whose Germanicness is mainly based on the fact that Germanic is the only directly attested *centum* subgroup located anywhere close to Finnic and Saami (cf. Koivulehto 2002: 585-586; Kallio 2012: 227-228).

In any case, Latvian *Gaũja* and Lithuanian *Gáuja* must relatively early have entered Baltic, because apart from the *centum* reflex there are no other phonological irregularities.⁶ All this agrees with the common opinion that Baltic has been spoken in its present territories for millennia (see e.g. Gimbutas 1963). Even the arrival of the Finnic speakers in northern Latvia from the second century AD onwards hardly led to a complete language shift from Baltic to Finnic, but northern Latvia much more likely remained bilingual. Note that the earliest historical sources, such as Henry's chronicle of Livonia

written between 1224 and 1227, do not disprove this idea, because they were interested in ruling classes rather than masses. Interestingly, Henry only used the Finnic name of the Latvian Gauja (cf. *Coiwa*, *Coywa*, *Goiwa*, etc.; Alvre 1985: 34), something that one would not expect from a native Baltic speaker. Since the German names *Treider Aa* 'Turaidan river' and *Livländische Aa* 'Livonian river' are of more recent origin, Henry might better have been a German who first got to know this river through the Finnic speaking Livonians living around the Gulf of Riga.

Curiously enough, the Finnic name of the Latvian Gauja has not been preserved in Livonian whose literary language alone has a recent Estonian borrowing *Koiva*.⁷ While this is understandable in the case of Courland Livonian spoken on the other side of the Gulf of Riga, it is strange that the admittedly limited corpus of Salaca Livonian includes no name whatsoever for the Latvian Gauja, although I would personally call it bad luck rather than proof of anything, because attested Salaca Livonian hydronyms can be counted with one hand (Pajusalu & Winkler 2011: 180–181).⁸ Hence, we may safely assume that Finnic **koiva* still existed in Livonian at least in Henry's time. The fact that Henry preferred Finnic **koiva* over Baltic **gaujā*

- Late Proto-Finnic **kuiva* > Proto-Livonian **kuija* > Courland *kūja*, Salaca *kuja* 'dry'.
- Late Proto-Finnic **laiva* > Proto-Livonian **laija* > Courland *lōja*, Salaca *laja* 'boat'.

And sometimes, for no obvious reason, regressively to *uv:

- Late Proto-Finnic *kaiva- > Proto-Livonian *kouva- > Courland kovab, Salaca kovab 'to dig'.
- Late Proto-Finnic **päivä* > Proto-Livonian **päuva* > Courland *päva*, Salaca *päva* 'day'.

Thus, Finnic *koiva would have yielded either *koija (> Courland $\dagger k\bar{u}oja$, Salaca $\dagger koja$) or (*kouva > *këuva >) *küvva (> Courland $\dagger k\bar{o}va$, Salaca $\dagger k\ddot{u}va$).

^{5.} For semantic reasons, the hydronym *Gaut(elfr)* looks more primary than the theonym *Gautr* 'Odin' and the ethnonym *Gautr* 'Geat', both of whose proposed denotation '(sperm-)pourer' sounds like a Freudian slip to me.

^{6.} As far as the metatonical acute is concerned, consider this rhyme word: Latvian *jaŭja* 'threshing floor', Lithuanian *jáuja* 'granary, drying shed, threshing shed', Old Prussian *jauge* 'drying shed, barn for braking flax' < Proto-Baltic **jaujā* < Proto-Balto-Slavic **iouiaH* < Proto-Indo-European **ieu-iH-eh*₂ 'grain place' (Derksen 2008: 147–148).

^{7.} In Common Livonian, postvocalic **iv* was subject to partial assimilation, although sometimes progressively to **ij*:

^{8.} Anders Johan Sjögren during his 1846 fieldwork collected most of the linguistic data of the then nearly extinct Salaca Livonian language (Winkler 1994: 104–388), whose hydronyms, however, can almost exclusively be found in Thomas Hiarne's one-page handwritten glossary dating about 1665 (Winkler 1994: 23–30):

is nothing compared to the fact that even the Jumāra was known to him by its Finnic name *Ymera* (cf. Estonian *Ümera jõgi* vs. Latvian *Jumāra*), although he served no less than half a century as a parish priest near this Gauja tributary deep inside the Latgalian Tālava county. We can therefore conclude that this area was indeed strongly bilingual and that Henry's command of Finnic was obviously better than that of Baltic (see especially Murray 2011, but also other articles in the same collection).

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Hiärne "Weina die Düne" = Henry Veina(lenses); Sjögren Vēn 'the Daugava'
 Finnic *väinä ← Early Slavic *dvæinā > Russian (Западная) Двина 'the (Western) Dvina' (Būga 1961: 503, 882–883). Incidentally, I hope that Proto-Germanic *dväin (sic!) constantly offered by the Finnish etymological literature would no longer be recycled in the future.

[•] Hiärne "*Ayia* bach liegt 8 ½ meil von Riga" = Henry *Adia*, *Adya* 'the Aģe' < Finnic **akja* 'edge' (cf. already Bielenstein 1892: 62).

[•] Hiärne "Salasta Salis" = Henry Saletsa; Sjögren Salats 'the Salaca' < Finnic *sala-icca (cf. Virtaranta 1946), although I cannot decide what the stem word was.

[•] Hiärne "*Lembse joggi* läuft in die Sahlische bach". Since this river has not yet satisfactorily been identified (cf. Pajusalu & Winkler 2011: 180–181), I now suggest that *Lembse joggi* was the old Finnic name of the Svētupe, which at that time still flowed to the Salaca and which used to be an important waterway to the Hanseatic town of Limbaži (cf. Estonian *Lemsalu* < Finnic **lemisalo* 'swamp island'?).

Hiärne "*Ymera* |: liegt zwischen Helmet [Helme] u. Dörpt [Tartu] läuft Ermis [Ērģeme] vor bey in die Treydera [Gauja]" = Henry *Ymera* 'the Jumāra'. Apart from the Jumāra being a Gauja tributary, Hiärne's definition does not fit the Jumāra at all, neither does it any other river for that matter. Thus, he might instead have referred to a series of rivers and portages linking the Gauja and the (Väike) Emajõgi.

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Tiivistelmä

Petri Kallio

Artikkeli käsittelee Latvian toiseksi suurimman joen Gaujan eli Koivajoen balttilaisten ja itämerensuomalaisten nimien etymologiaa. Johtopäätös on, että kantabalttilainen $*gauj\bar{a}$ on omaperäinen johdos ja että kantasuomalainen *koiva on siitä lainaa. Artikkelissa myös ohimennen sivutaan kaikenlaista muutakin aiheeseen enemmän tai vähemmän liittyvää kuten balttilais-itämerensuomalaisia kielikontakteja, Baltian etnohistoriaa sekä Latvian alueen kielitilannetta historiallisen ajan alussa.

Kopsavilkums

Petri Kallio

Raksta tēma ir Latvijas otrās lielākās upes Gaujas (igauņu valodā Koiva) nosaukumu etimoloģija baltu un finu valodās. Secinājums: baltu pirmvalodas vārds *gaujā ir baltu cilmes atvasinājums, un finu pirmvalodas vārds *koiva ir aizguvums no tā. Rakstā virspusēji apskatīti arī faktori, kas vairāk vai mazāk attiecas uz tēmu, kā baltu- un Baltijas jūras somugru valodu kontakti, Baltijas etniskā vēsture, kā arī valodas situācija Latvijas teritorijā vēsturiskā laika sākumā. LAIMUTE BALODE University of Helsinki / University of Latvia

Criteria for Identifying Possible Finnicisms in Latvian Toponymy

0. Introduction

The current article is based on experience gained working on the *Dictionary of Latvian Place-Names*, a long-term project which was started by Jānis Endzelīns and continued by his students (Lvv I, II, 1959, 1961), and which is at present being compiled by specialists in onomastics at the Latvian Language Institute (University of Latvia) (Lvv III 2003; Lvv IV 2006; Lvv V 2009; Lvv VI 2013). One of the tasks that the authors and editors of this bulky work face is to identify possible borrowings in Latvian toponymy. Some previous studies have already discussed criteria for identifying possible Lithuanisms in Latvian toponymy (see Balode 2006, 2007). This article focuses on possible place-names of Finnic origin in contemporary Latvia.

There are many studies of borrowings from Finnic languages on the appellative level, as well as on the onomastic level of the Latvian language (see bibliography in Balode, Bušs 2007 and Bušs 2009). In order to identify all possible Finnicisms in Latvian toponymy (a rather utopian goal), one should start with criteria that indicate a potential borrowing.

1. Theoretically all criteria can be categorized *a priori* as lexical, phonetic, and morphological.

1.1. <u>Lexical borrowings</u> in the toponymy first of all stand out as a "foreign body" in the Latvian language system. At least two groups of lexical borrowings can be discerned in Latvian toponyms: 1) names borrowed from Finnic languages; 2) names derived from Latvian

appellatives which are themselves Finnic loan words (such toponyms are usually defined as 'indirect Finnicisms').

1.1.1. The first group of lexical borrowings consists of names that have entered the Latvian toponymicon from Livonian and Estonian. The following are some examples from previous studies (Būga RR III; Rudzīte 1968; Balode 2007; Balode, Bušs 2007, 2009, etc.):

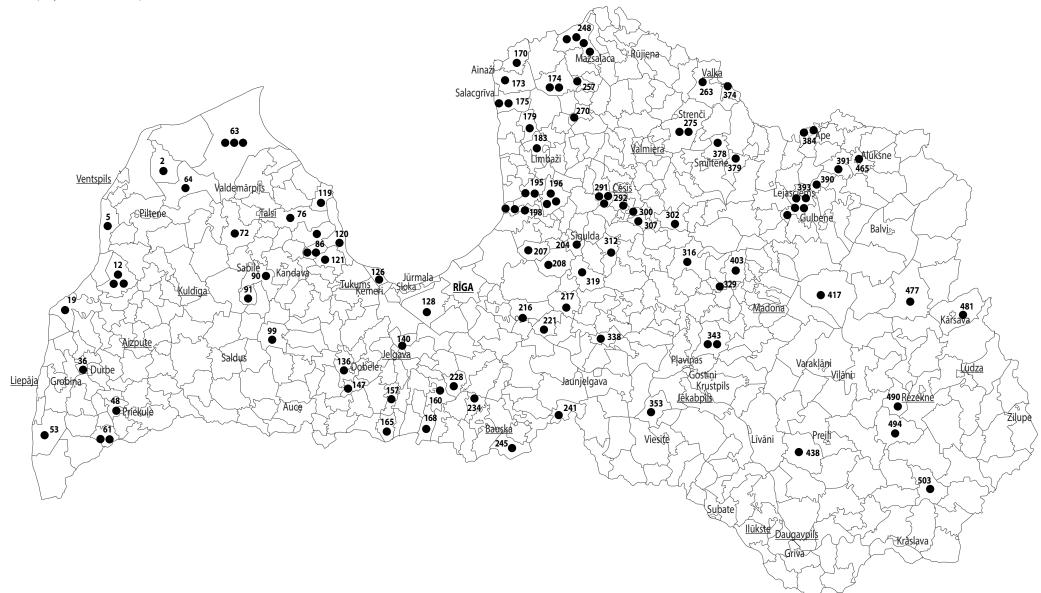
- Aga river in Alsunga¹(12), Agas valks rivulet in Pope (2): Liv. aguD'needles', Est. hagu 'Reisig [brushwood]', Haga farm-house and Aga-silla village (Lvv I 5). Cf. also Est. lake Agusalu järv (Rudzīte 1968, 178; Hirša 1987, 83–86). The Est. form (h)aga 'brushwood, branches' with -a at the end of the word is used also in Western dialects of Estonian. Semantically cf. also river-names in Latvia: Skuja, Skujaine, Skujas strauts, Skujasupe, Skujatne, Skujene, Skujupe, Skujupīte (Avotiņa, Goba 1986, IV 15–16) < Latv. skuja 'needle'. (On other possible hypotheses regarding this onomastic root see Vanagas 1981, 35; Balode, Bušs 2007, 29–30). In this case, possible comparison with Swedish haga > Finn. haka 'pasture' seems more speculative: on one hand, borrowing from Finnish is phonetically (cf. voiceless -k-) impossible and semantically, for a river name, less likely; on the other hand, borrowing directly from Swedish is historically improbable.
- Aģe river (Germ. Adja) from Lēdurga till the Baltic Sea, Aģes ezers lake in Lēdurga (196), Aģe river in Ozoli (270), Aģes strauts in Limbaži (183) region: maybe Liv. ad'a 'coast, bank' (Bielenstein 1892, 62; Lvv I 6; Rudzīte 1968, 178). The appellative ad'a 'Rand, Ufer, Gegend [coast, bank, edge]' is known from Salaca Livonian (Winkler, Pajusalu 2009, 41) and this is the region where these hydronyms were recorded. K. Būga has also suggested a Finnic origin for this hydronym < * Adja (Būga RR III, 98–99). This etymology was proposed by A. Bielenstein; later it

was endorsed by Endzelīns and Rudzīte, though the motivation for these hydronyms seems to be doubtful.

- Jērkules ezers lake in Bīriņi (198); cf. Est. järv 'lake' and küla 'village' (Lvv I 399; Rudzīte 1968, 181). Obviously the name of the inhabited place Jērkule // Jērķile (Germ. form Jerküll, 13th century Gerwi-kule) must be primary; A. Bielenstein already linked this oikonym with the afore mentioned Est. järw [järv] and Liv. jora, jara, järu (Bielenstein 1892, 53) (see also Balode, Bušs 2007, 33).
- Kalekaura ezers // Kalakaura ezers lake in Jaunroze (384): Est. kalakauŕ 'Polartaucher [black-throated diver]' (Lvv II 11; Rudzīte 1968, 181; Avotiņa, Goba 1984, II 44; Balode, Bušs 2007, 37). The lake and also a farmstead Kalekaus are located in the border area. An alternative etymology could be: Latv. Kalna-Kaurs (farmstead) > Est. Kalakauri > Latv. Kalakaura ezers (etymology proposed by Evar Saar).
- *Kiurga* rivulet in Ogresgals (221), *Kivurga // Kiurga* river in Bīriņi (198) and Vidriži (195), *Kiupe // Kiurga* river in Lejasciems (393) (Zemzare 1940, 77); cf. Liv. *kiv, kiu, kiuv* or Est. *kivi* 'stone' (see also Rudzīte 1968, 185).
- *Kulene* rivulet in Mazsalaca (248): Est. *küla* 'village' (see Rudzīte 1968, 185). In this case, maybe one can see the Finn. diminutive *-ne(n)* < **Külänen*.
- Lainums lake in Matkule (90), Vāne (91) (Lvv II 249): Liv. lain (lain) 'Woge [wave]' (Winkler, Pajusalu 2009, 105). See further Kfr. 218; Rudzīte 1968, 185.
- *Ojas upe* river in Barkava (245) (Konv. I 1838), *Oja* homestead in Ainaži (170) (Lvv II 490): Est. *oja* 'Bach [brook, rivulet]' (Rudzīte 1968, 188), also Salaca Liv. *oja* 'Teich, Weiher [pond]' (Winkler, Pajusalu 2009, 105).

^{1.} The place after the toponym indicates the localization according to the administrative division of Latvia into civil parishes (Latv. *pagasts*) before WWII. The number in brackets after the name of the civil parish corresponds to the number on the map of Latvia (see Figure No.1).

Figure 1. Locations of the civil parishes of Latvia where the place-names of possible Finnic origin mentioned in this article are recorded. Map by Edmunds Trumpa.



- Punača pūrs swamp and Punaču kolli hills in Lejasciems (393): Est. Gen. sg. punase, punatse from punane 'red' (Zemzare 1940, 63). In South Estonian, which was probably also used in the contact area, punanõ means 'brownish-red'. Helonyms (swamp names) with analogous semantics (cf. Sarkanpurvs < Latv. sarkans 'red') are well-known in Latvia (Balode, Bušs 2007, 20). There are also other possible hypotheses regarding the origin of these toponyms (Lvv V 179).
- Puņa meadow in Kalēti (61) E II 15, Puņa līcis forest, meadow in Vietalva (241) 1960, Puņa puors former swamp in Aistere (36) 1966, Puņi homestead in Sunākste (353) E II 67, etc. These placenames are most plausibly connected with Liv. pún 'korķis [cork]', 'spunde [bung, stopper, plug]', puńń 'bišu strops [bee-hive]', puńńi 'punains [knobbly, bossy]' (Kettunen 1938, 314, 315; Lvv IV 192–193) (for more toponymical examples see Balode, Bušs 2009, 18–19).

The following are some more examples of toponymic Finnicisms from the latest, still unpublished volumes of the Dictionary of Latvian Place-Names (letter *R* /Lvv VI/ and letter *S* /Lvv VII/):

- Rabaž-kalni homestead in Svētciems (175) E I 107, Rabažkalns hill in Dzintarciems, resp. Svētciems (175) 1957; according to K. Būga (Būga RR III, 620), this is a toponym of Finnic origin, cf. (?) Est. *raba* 'marsh, swamp'; however, this appellative is not known in South Estonian. Maybe these Latvian toponyms are reshaped from the very common Estonian toponym *Rebas-mägi* 'fox hill' (supposition proposed by Evar Saar).
- Raiskums parish, estate in Raiskums (291) E I 101, Raiskuma ezers lake in Raiskums (291) 1963, Raiskuma kalni hills in Raiskums 1972, Raiskumi homestead in Allaži (208) E I 35, homestead in Inčukalns (207) 1975, Raïskumu māja homestead in Saka (19) 1973, etc.: Būga (RR III, 617) and Rudzīte (1968, 189) supposed Latv. inhabited place Raiskums (ancient document forms after Bielenstein (1892, 67) are Rascomene and Rascomäägi) as a possible

Finnicism. Cf. (?) Est. *raisk* '(something) unfit, unusable; carrion', *raiskama* 'to damage, to waste' (Wied. 921). Cf. also Liv. *raiska* 'to waste' (Kettunen 1938, 328), Liv. *raiskõ* (Viitso, Ernštreits 2012, 263), Salaca Liv. *raisk* (Winkler, Pajusalu 2009, 163).

- Ramma homestead in Auri (147) 1811 (U V 386), Rammas homestead in Dobele (136) (< surname Ramma) 1959, in Viļķene (179) E I 113 (compound toponyms Kaln-Rammas and Lejs-Rammas were later recorded at the same place in 1957). Būga (RR III, 617) suggested that the name was derived from Est. ramm 'schwach [weak, feeble, infirm]'; cf. also Est. name of inhabited place Ramma, Latv. surname Ramma (Staltmane 1981, 117). There is also an oikonym (settlement name) Rampala in Finland < rampa (G. ramman) 'crippled' (KOTUS).
- Sude river in Sigulda (204) E I 116, Sudaliņš river in Lejasciems (393) (Zemzare 1940, 78), Sudaļu ezers lake in Zeltiņi (390), Sud-urga rivulet in Lēdurga (196): Liv. suž or suiž, Gen. sud, Est. susi, Gen. soe < suden, Finn. susi, Gen. suden 'wolf' (Būga RR III, 617; Rudzīte 1968, 191).

Latvian toponyms coined from Estonian dialectal forms should also be mentioned in this group of toponymical Finnicisms:

- Ainass river (the left tributary of the river Malta): cf. Est. hain (= dial. form; standard Est. hein L.B.) 'hay' (Breidaks 1989, 327; 2000, 371). From the phonetic point of view cf. also the name of an inhabited place in Latvia in the Estonian borderland Latv. Ainaži, Est. Heinaste.
- *Pilik-urga // Pilik-urga // Pilik-upe* ditch in Lejasciems (393) near the river Gauja (Lvv IV 42). Daina Zemzare (Zemzare 1940, 61, 78) has connected this hydronym with Est. dial. (Leivu²) lexeme

^{2.} The isolated Leivu – a particular dialect of South Estonian– was surrounded by Latgalian High Latvian and strongly influenced by it. The Leivu linguistic island was mostly replaced by the Latvian language already by the beginning of the 1930s; the last Leivu speaker died in 1988. (Viitso 2009, 269)

pilika 'rowan-tree', cf. standard Est. *pihlakas*. This etymology was also endorsed by Marta Rudzīte (Rudzīte 1968, 189) (see also Balode 2007, 54).

Clear lexical parallels between the place-names of Latvia and the place-names of Estonia and Finland allow more confident identification of potential borrowings, for example:

- Emeru valks brook in Dundaga (63), also homestead names Emari // Emmeri, Emarkalni (Lvv I 272): Liv. ämàr 'dark; twilight' (cf. Finn. hämärä, Est. hämar 'idem'), cf. also Est. villagename Ämari (this etymology and comparison were proposed by Jānis Endzelīns in Lvv I 272). Cf. also Finnish place-names with Hämärä-: Hämäräkolu ("ojan syvä notku metsässä [a sharp bend in a ditch in the woods]"), Hämärämäki, Hämärämetsä, Hämäräniemi, Hämäräsuo (Balode, Bušs 2007, 30–31). See also another etymological hypothesis proposed by Valentin Kiparsky (Kfr. 209–210).
- *Keldas ezers* lake and *Keldas ezerupe* river in Sēme (121) (E II 162); Cf. (?) Est. oikonym *Keldo* (Lvv II 203) // *Keldu*, which is a peasant's byname. Marta Rudzīte also compares this name to Est. limnonym *Keldu järv* (Rudzīte 1968, 184), which is a secondary name based on the homestead name *Keldu*. Cf. (?) also the South Estonian appellative *kelt* 'dried fish'.

1.1.2. The second group of lexical borrowings are the so-called <u>indi-</u> <u>rect Finnicisms</u>, i.e., Latvian toponyms coined from Latvian appellatives which in turn are Finnic loanwords, for example:

Iviks // Īviks former (overgrown) lake in Lejasciems (393), Ivika pūrs //
Īvika pūrs swamp at the same place (Lvv I 369). Daina Zemzare (1940, 42–43) linked these toponyms with Latv. dialectal lexeme īviks 'some kind of grass (cotton-grass)', which in turn is most likely borrowed from Est. ivikas 'körnig, körnreich [grained]', iwwike [in modern form ivike] 'little grain, corn, granule' (Zemzare 1940, 42–43). This is the only record of the dialec-

tal lexeme *īviks* in Latvia (Zeps 1962, 111). J. Endzelīns and M. Rudzīte only mention Est. iwwike [ivike] 'little grain, corn, granule' as a possible etymon of that lake name (Lvv I 369; Rudzīte 1968, 180). Nevertheless, from the semantic point of view it is more credible that the limnonym (lake name) and helonym (swamp name) mentioned above were derived from the Latv. dial. name of marsh grass *īviks* (semantically cf. two Latvian limnonyms with Spilv- (Avotina 1984 V, 28) < Laty. spilve 'cotton-grass'); in this case the connection with Finnic languages is indirect, through a Latvian appellative of Finnic origin (see also Balode, Bušs 2007, 33). According to Evar Saar, there is a known appellative ilveshain 'cotton grass' in South Estonian, which is probably a Latvian loanword. There are also some swamps named Ilvessuu in South Estonia, perhaps connected with the name of this grass. One should also consider Leivian ivikhain = Mulgi dialectal jõhvikhain 'some kind of swamp grass' (EMS) $< j\tilde{o}hv$ 'horsehair', because this grass is hard to cut as horsehair; cf. Est. helonym Jõhvsoo which is a usual South Estonian place name. Perhaps the root jõhvik- has changed to ivik- under Latvian influence (?) (etymology proposed by Evar Saar).

- *Kangarezers* lake in Suntaži (217), *Kangars* homestead in Aloja (174), *Kangari* homestead in Dundaga (63), *Kangar-kalns* hill in Krape (338), *Kangar-mežs* forest in Alsunga (12), *Kangarene* meadow in Alsviķis (391), and many other toponyms (Lvv II 37–38): Latv. appellative (Finnicism) *kangars* 'ein Hügelzung [hill, sand-hill, dune]'< Liv. *kāngar* 'Hügel [hill]' (ME II 154) (see also Rudzīte 1968, 182).
- Ķepu upe river in Nītaure (312), Ķepas purvs swamp in Mēris (379), Ķepēni homestead in Kalsnava (343), Ķepīte homestead in Trikāta (275), etc. (Lvv II 207): Latv. borrowing from Finnic languages ķepa '1. 'ein klebriges, altes Kleid [a sticky, old garment]'; 2. der Klumpen, Ballen, Flocke [the lumps, bales, flake]; 3. die Tatze [paw]' loanword from Liv. käpā [Kettunen: käppa] resp. Est. käpp 'Pfote, Klaue, Hand [paw, hand]' (ME II 366) (?). The motivation for such toponyms as hydronym or helonym is rather

doubtful. Cf. also Est. lake *Käpajärv* (Rudzīte 1969, 184), though it could be coined from an anthroponym. Another lexeme should also be mentioned: Finn. *käpy* / Est. *käbi* '(pine)cone'. There are several toponyms in Finland with the root *Käpy*- (KOTUS). It is also possible to consider other hypotheses regarding the origin of these Latv. toponyms: cf. Latv. appellatives *kepe* I 'der Klumpen, Ballen, Flocke [the lumps, bales, flake]; II 'ein Stab, ein Stock [walking-stick]'; *kepis* I 'ein Klumpen [lump, bale]' (ME II 367), but the semantics of these Latv. words do not seem to fit as etymons of the toponyms under discussion. Cf. also the village name *Kepių kaimas* in Lithuania (Lvv II 207), which is also a rather obscure oikonym.

- Ķīvīte homestead in Valka (374), meadow in Braslava (257), Ķīvīte *K*īvē river in Vilce (165), Ķīvītes kalns hill in Code (234), Ķīvīš-pļava meadow in Mērsrags (119), also Ķīvvalks brook in Dundaga (63), etc. (Lvv II 236–237): Latv. borrowed lexemes of Finnic origin ķīvītis, ķīvīte, ķīvenis, ķīvens 'der Kiebitz [plover, lapwing, peewit]' < Est. kīwit < LGerm. kiwit (ME II 390). Cf. (?) also Latv. Ķīvvalks to Lith. river-name Kývė and Est. homestead name Kiive (Lvv II 236; Rudzīte 1968, 185). At least in part, some of those place names may be based on Est. kivi 'stone' and kivist- // kivest-stem in kivistik, kivestü 'stony place'.
- Ķīša ezers lake in Trikāta (275), Ķīšu strauts in Dzirciems (86), Ķīšezers lake in Alsunga (12), Lauciene (76), Valgunde (140), etc., Ķīšupe river in Engure (120), Vidriži (195), Bīriņi (198), Ķīšupīte brook in Mazsalaca (248), Ķīšvalks brook in Puze (64), Užava (5), etc. (Lvv II 235): Latv. ķīsis 'Kaulbarsch [pope, ruff]', which is believed to be a word of Finnic origin < Liv. kīš 'Kaulbarsch, Stint [pope, ruff]' (ME II 389), also Est. kiisk, Gen. kiisa, South Est. kiiss, Gen. kiisa 'idem' (Lvv II 235; Rudzīte 1966, 185; Balode 1991, 50).
- Puikas gabaliņš field in Alūksne (465), Puīkas homestead in Ikšķile (216), Jaunsvirlauka (160), Salgale (228), Maz-puīkas former homestead in Babīte (128), Meža puikas homestead in Jēkabnieki

(157), *Puĩku atvars* whirlpool in Bilska (178), *Puĩku kalns* field in Dagda (503), *Puĩķi* homestead in Sesava (168), *Puĩķeļi* former homestead in Kalēti (61), *Puĩķene* meadow in Stende (72), etc.: Latv. *puiķis* = *puika* 'der Knabe [boy, youngster]' < Est. *poeg* (ME III 403); this Latvian appellative (*puika*) is widely spread in all Latvia (also in Standard Latvian), therefore, other possible etymological explanations seem implausible (Lvv V 130–132; for more examples see Balode, Bušs 2009, 23–24).

Puíša dīkis pond in Remte (99), Puiša ezers lake in Zentene (79), Puiš-ezers lake in Dzirciems (86), Puiša priedes field in Jaunroze (384), Puiši homestead in Malta (494), etc.: Latv. puísis 'ein Knabe, der Junge, der Junggeselle [boy, youngster]' (ME III 403) (Lvv V 132–135). Semantically cf. Latv. Dēliņa kalns hill, Dēliņkalns hill, Dēliņi several homesteads: Latv. dēls 'son' (see more examples Lvv I 210), Lith. Berninykas river, Bernakampė lake, Bernaupis etc.: Lith. bernas 'boy, youngster, unmarried man, farm-hand' (Vanagas 1981, 62).

The following example can also be mentioned in the group of indirect Finnicisms:

Jumala lake in Vecpiebalga (316) (Lvv I 403) is coherent only with Latv. appellative jumala (ME II 17 does not include an etymological explanation of the word; however, in a previous publication J. Endzelīns (Endzelīns 1934, 134) has compared the aforementioned limnonym with the Latv. potamonym (river name) Jumara, which, he assumed, was very likely of Livonian origin, without, however, providing a concrete possible etymon). Cf. Latv. dialectism jumala, jumis 1. 'philippina, double spike', 2. 'fertility deity of the fields' (LLVV 4, 56). Konstantīns Karulis has no doubt that Latv. jumala/jumis is an inherited word of Indo-European origin (Karulis 1992 I, 361). According to Valdis Zeps (Zeps 1962, 114), the relationship between the previously mentioned Latv. appellatives and Est. jumal, Liv. jumāl 'god' is obscure. Attention should be paid to the semantic parallels: cf. Latv. hydronyms Dievinezers lake in Lubezere, Diemestezers

lake in Griķi, *Die(v)mests ezers* lake in Kabile, *Dieva mests ezers* lake in Abava, also *Dieva dīķis* pond in Nīca, *Dieva atvariņš* whirpool in Skaistkalne and many other place-names with *Diev-*: Latv. *dievs* 'god', dimin. *dieviņš* (Lvv I 220–221). It is interesting that not a single limnonym **Jumalanjärvi* is recorded in Finland (only *Immeljärvi* in Lapland, cf. Saami *ibmel* [North Saami *ipmel*] 'god'), although the hydronyms *Jumalanjoki* and *Jumalanpuro* are known (KOTUS). It should be mentioned that A. Bielenstein notes only the oikonym *Jumala* in Zemgale, and he is completely sure it is of Finnic origin (Bielenstein 1892, 370) (see also Balode, Bušs 2007, 35–36). The river-name *Jumalda*, recorded in Alūksne, should perhaps also be mentioned here (Lvv I 403, with a reference to Būga 1923, 377 [Būga RR III, 614]).

1.2. There are no consistent patterns of <u>sound substitution</u> in the adaptation of Finnic loanwords to Latvian. Some common phonetic substitutions, however, have been mentioned by Valdis Zeps (Zeps 1962, 97–99) – he writes about following "sound correspondences":

- initial Finnic voiceless consonants are sometimes rendered as voiced (Liv. *pūraz* Latv. *bura* 'sail', Liv. *pekā* Latv. *beka* 'mushroom', Liv. *súojm* Latv. *zaimuot* 'to blaspheme');
- Finnic k before front vowels is rendered as Latv. k (Est. kipp Latv. kipis 'dipper', Liv. kēm – Latv. kēms 'spook'); this phenomenon is also widely represented in toponyms;
- a prothetic *s* (resp. *š*) may develop in Latvian (Est. *lõks* Latv. *slekšas* 'mousetrap', Liv. *kiršt* Latv. *šķirsts* 'box');
- a tautosyllabic *n* is retained in the overwhelming number of cases (Liv. *līnga* Latv. *linga* 'sling');
- Finnic *ü* tends to be rendered as Latv. *u* (Est. *kütis* Latv. *kute* 'clearing');
- Finnic *a* after *j* may be rendered as Latv. open *e* [æ] (Liv. *jālga* = Latv. *jelgas* 'feet');
- Finnic \bar{o} (Liv. $\bar{u}o$) is represented by Latv. uo (Est. $j\bar{o}m$ Latv. *juoma* 'lagoon');
- Finnic mid vowels are replaced by Latvian high vowels in falling diphthongs with *i* (Finn. *moisio* Latv. *muiža* 'estate');

 Finnic au, ou, ou yield Latv. au (on occasion uo) (Est. lõuna 'south' – Latv. launags 'lunch, afternoon snack'. (for more see Zeps 1962, 97–99)

Generally accepted <u>phonetic "signs"</u> of Finnic borrowings include the diphthongs *-oi-* and *-ui-*, for example, in several homestead names in Latvia: *Loibas, Poikas, Soidu ezers, Tuimi, Uikas*; also the rare sequence *-or-*: *Porka*.

The Finnic origin of toponyms can sometimes be seen from the consonant k in the position before front vowels, especially for those toponyms that are found in the areas previously inhabited by Livonians or in the northern part of Latvia: *Keldas ezers*, *Kelderu strauts*, *Keņģupīte*, *Kepu upe*, *Kibupe* (in Allaži), *Kiku strauts* (Daina Zemzare /1940/ and Marta Rudzīte /1968, 185/ connect it with Est. *kikk* 'cock, rooster' [*kiku* – diminutive form from *kikas*, Gen. *kikka* 'cock, rooster']), *Kidurga, Kiurga, Kirele, Kirvalks, Kirumezers, Kīšezers*, *Kīvvalks, Kulene, Neķe, Uķis*, etc. Many of these Latvian hydronyms are also mentioned by Rudzīte (1968) as possible Finnicisms.

The foreign consonant h, which in general is rare in Latvian toponymy (it occurs only in loan words and loan names), can also be treated as a sign of possible Finnic origin.

1.3. The search for <u>morphological criteria</u> for potential Finnicisms poses the greatest uncertainty and challenge. Previous studies treated the toponymical formants *-aži*, *-uži*, *-iži*, which are related to Livonian form *-sele* or *-sile*, i.e. Old Livonian Allative or Adessive pl. (*Pabasile*, contemporary form *Pabaži*) (see Endzelīns DI III-2, 93), as morphological signs of possible Finnicisms: *Ādaži*, *Aijaži*, *Ainaži*, *Antiži*, *Anuži*, *Eikaži*, *Jūdaži*, *Kainaži*, *Kainaiži*, *Ķirbiži*, *Kuiviži*, *Lembuži*, *Limbaži*, *Lugaži*, *Nurmiži*, *Pabaži*, *Ropaži*, *Rūstuži*, *Suntaži*, *Tiegaži*, *Vaigaži*, *Vangaži*, *Vidriži*, etc.

August Bielenstein, as well as Wilhelm Thomsen, viewed *-sile* or *-sele* in Latvian compounds as a root of Baltic origin with the meaning 'Hügel' from Latv. *sala* 'Holm, Hügel [island, hill]' (Bielenstein 1892, 45, 48, after Thomsen and Kunik).

It is worth comparing these Latvian oikonyms with numerous toponyms of Ingria, for example: *Haisevaisi* (contemporary toponym

Rus. Больша́я Ижо́ра, Bolšaja Ižora), Kuivaisi (Rus. Ку́йвози, Kuivozi), Lepäsi (Rus. Лебя́жье, Lebjažje), Narvusi (Rus. Куземкино, Kuzemkino), Villasi (Russ. Ви́ллози, Villozi), although there are no clear-cut phonetic sound correspondences (such as Finnic *s >Latv. \check{z}). See also the formant - $\check{z}a$ in substrate names of northern Russia, which is explained as a Finno-Ugrian diminutive (Matveev 2004, 21; Rahkonen 2011, 238).

Kristiina Fasoúlas (Fasoúlas 1977) has thoroughly investigated Ingrian village names. After a close analysis of many eighteenth-century oikonyms recorded in church documents, for example, *Niukkasi*, *Papusi*, *Horvosi*, *Kannisi*, *Salusi*, *Hylkysi*, *Hirvosi*, *Honkasi*, *Villasi*, *Myllysi*, *Vahviaisi*, etc. (Fasoúlas 1977, 114), she concluded that this type of toponym originated from the Genitive pl. form of surnames: *Peikalais* < *Peikalaisinkylä*, *Oloisi* < *Oloisinmäki*. (Fasoúlas 1977, 114, 115) The author also conjectured that *-si* might be an ancient feature of toponyms of Finnic origin (Fasoúlas 1977, 118).

The formant -*si* also occurs in Finland (for instance, in the village name *Episi* in Paimio parish) where it could be derived from an older form of the Finnic suffix -*nen* (*hevonen* : *hevos*-, *Räsänen* : *Räsäs*-). There are many place-names with -*si* in Estonia as well (see map in EMK 284).

The aforementioned studies give rise to new ideas about the origin of Latv. toponyms with -*ži*. For instance, comparison of the Latv. toponym *Ainaži* and its Estonian name *Heinaste* points to the possible development of this suffix. Estonian names with -*ste* are morphologically very close to Estonian names with -*si*; sometimes both are used in parallel: *Viroste järv // Virosi järv*, *Pihuste // Pihosi*. Both suffixes derive from the Genitive plural form of adjectives in -*ne* (Pall 1977, 84–88). Hence, Nom. *nurmine*: Gen. pl. *nurmiste* or *nurmiside*; the Allative pl. form is *nurmistele* or *nurmisile*. The innovative Estonian suffix -*de*- is not used in place names. It is possible that -*si* was much more acceptable in language shift from Finnic to Baltic or Latvian than -*ste* (etymological idea expressed by Evar Saar).

Another morphological marker of possible Finnicisms relates to the second component of compound toponyms (limnonyms) with -(*j*)eris, -(*j*)ēris or -(*j*)ieris < Liv. jōra (järu), Est. järv 'lake': Ninieris lake in Cēsis (292) and in Priekule (48) (Lvv II 480); Dūņieris lake in Engure (120); *Juveris* lake in Dzērbene (302) (cf. (?) Est. dial. *jyvä* 'corn; modicum'; or Liv. *juva* 'good'; see also Būga 1923, 383; Lvv II 42; Balode, Bušs 2007, 37); *Siveris* lake in Krāslava (see also Breidaks 1983); *Sàsēris* lake in Lubeja (329) (also Būga RR III, 622); *Gulbēris* lake in Madona (414); *Piniers* former lake in Liezēre (403); *Kaņieris* lake in Sloka (126) (in 1253 it was recorded as Canygerwe, Canygeruwe; in 1330 as Caneierve (Bielenstein 1892, 188), and *Kaņieres upele* brook in Nīca (53) (see also Būga III; 622, Kfr. 213–214; Balode, Bušs 2007, 38); *Spicieris* in Valka (343), *Ķeiseris* lake in Mālpils (319) (Lvv II 202).

Compound oikonyms with the second component *-kila*, *-kile*, *-kule* < Liv., Est. *küla* 'village' can also be analysed as possible Finnicisms in Latvian territory: *Ikšķile* (ancient document forms Ykeskola, Ickesculle (Bielenstein 1892, 43) (see also Būga III, 622)), *Ērkule*, *Matkule*, *Puikule*. K. Būga has also mentioned such toponyms as *Menkuļi*, *Vankuļi*, *Senkuļi*, *Serkuls // Selkuls*, *Vīkulis*, *Parkulis* (Būga III, 622); however, not all of these have identifiable markers of Finnic origin.

1.4. Many of the Latvian place-names analysed here demonstrate both phonetic and lexical characteristics of Finnicisms (see above /1.1. and 1.2./ such examples as *Kepu upe* river, *Kiurga* rivulet, *Kīša ezers* lake, *Kīvvalks* brook, *Kulene* rivulet, *Poikas* village, *Puikas* homestead, etc.). Thus, those place-names which combine at least two (or all three) of the criteria discussed above can be considered the most credible Finnicisms.

2. Localization as an additional criterion

The credibility of borrowings becomes stronger if the location of the place is in the former territory of the Livonian language or near the border with Estonia, particularly if there are clear parallels in Finnic onomastic material, for example:

Ērģeme river and inhabited place near the Estonian border < toponym form of Estonian origin *Härgmäe:* Est. *härg*, Gen. *härja* 'ox, bull' + mägi, Gen. mäe 'hill' (Wied. 583–584; Lvv I 283; Rudzīte 1968, 180; see also Balode, Bušs 2007, 31; Jansone 2013, 81–85). However, the second component of the toponym, mäe 'hill', leads one to conclude that the name of the river was derived from the oikonym rather than vice-versa (Jansone 2013, 84). Elga Kagaine calls this a boomerang borrowing: the root of the word (Est. härg, also Finn. härkä, Karelian härkä, Liv. ärga 'Ochs [ox, bull]'), which was borrowed into Finnic from Baltic languages (according Mägiste II 452–453; cf. Lith. žirgas 'Ross [horse, steed]', Latv. zirgs 'Pferd [horse]', Old Prussian sirgis 'Hengst [donkey]'), has returned back to the Baltic languages, but in the form of a toponym (Kagaine 2004, 103).

- Lepurgas grāvis ditch in Mazsalaca (248): Liv. *liepa*, Est. *lepp* 'alder', 'blood' and Latv. *urga* 'ein Loch in der Erde, ein Wasserloch [brook]' (ME IV 304), which also comes from Finnic languages: Liv. *ūrg(a)* 'kleiner Bach; Niederung mit fliessendem Wasser [small brook]' (Rudzīte 1968, 186; Balode 1991, 58). The river is in the former Livonian territory of Vidzeme. Cf. also South Estonian place name elements *ura* and *ora* 'stream, little river', which appear in the Estonian, Livonian and Latvian languages and place names (see further Faster 2009). K. Karulis had a different opinion about the toponymical nomenclature word *urga*: he argued that it is Baltic word (< Latv. verb *urgt* 'burbuļot, plūstot šalkt [to murmur, bubble, to sough flowing]'), which was borrowed into Livonian from the Latvian language (Karulis 1992, 456).
- *Lēturga* brook, tributary of River Svētupe: Est. *leede*, Gen. *leete* 'sandy soil, fine sand containing water' + *urga* 'brook' (ME IV 304, see sub voce *Lepurgas grāvis*); Būga compares it with Finn. *liete(h)* 'slime, mud' (Būga III, 623) (see also Lvv II 301; Rudzīte 1968, 186).
- *Lindurga* brook in Lugaži (263); cf. Est. village *Lindi* or Germ. *Linde* ? (Lvv II 308); cf. also Est. *Lindjärv* and Liv. and Est. *lind* 'Vogel; wilder Tier; Biene [bird; wild animal, bee]' (Kettunen 1938, 194) (Rudzīte 1968, 186). Cf. also Estonian village, former brook name *Lindora* (Võru Vastseliina). The meaning 'bird' is basic in Nor-

thern Estonian. In the old vernacular of South Estonian, the meaning of 'bird' has been lost, but the meanings 'wild animal' and 'snake' still exist (EMK) (comments on the etymology by Evar Saar).

These latter examples are found in the Northern part of Latvia, near the border with Estonia (*Lepurgas grāvis* in Mazsalaca and *Lēturga* in Svētupe). These names have equivalents in Estonian: cf. *Lindora* and *Leppura* (Võrumaa, Mõniste).

3. Possible obscure Finnicisms in Latvia

As is usually the case with the etymology of proper names, there are many unclear or dubious cases, in which several possible explanations of the origin of a given toponym are available. Some toponyms may be either of Baltic or Finnic origin, for example:

- *Laicenes-ezers* lake in Tilža (477); cf. (?) Est. inhabited place *Laitse* or Latvian plant name *làicene* '= *laiksne* [Teichrose]' in Lubāna (417) (EH I 711) (almost the same location as where the limno-nym is recorded) (Lvv II 247; Rudzīte 1968, 186).
- Here follow some toponymical examples from the newest volume of the *Dictionary of Latvian Place-Names* (letter *R*, Lvv VI):
- Randa several meadows in Aloja (174), Ozolaine (490), Salaca (173), etc., Randava river tributary of River Rūja, etc.: Latv. randa I 'ein niedriger Heuschlag am Meere [low hay meadow by the sea]' (ME III 477) (very credible comparison with Est. rand 'jūras krasts, jūrmala [seaside, beach]' and Liv. rānda 'strand [seashore]'). But cf. also Lith. village-name Rándžiai in Baisogala LKil. and lake-name Randiškių ežeras? (see also Rudzīte 1968, 190).
- Rauna river, Ràunis lake and river in Vaive (300), Raûnis // Rauņi homestead in Rāmuļi (307) E I 27, Raũnaisis // Raũnaîzis lake

in Rauna (296) E I 26, Raunieši village in Vārkava (438) 1962, etc. It is quite plausible that toponyms in Vidzeme are connected with Estonian lexemes (Būga RR III, 617, 647; Endzelīns 1934, 148; Rudzīte 1968, 190): Est. raun, Gen. rauna 'Steinhaufen, Stelle, wo Steine zusammen geworfen sind [rocky hillock, place where stones are thrown together]' (Wied. 932), also Est. homestead name Rauna, Finnish toponyms Rauna, Raune (Būga RR III, 647). However, (Western) Estonian raun is a Germanic loanword (*hrauna). There are no village names in Estonia starting with the root Raun-. If Latvian Rauna has a Finnic etymology, it may be compared with the same loanword in Finnish dialects rauna 'gravel, small stones on the bottom of a lake', which fits better with hydronyms (etymology proposed by Evar Saar). But see also several Baltic lexemes: Latv. rauna 'Brunst, Laufzeit [rut, heat]' (Endzelīns 1934, 148; Rudzīte 1968, 190), raūnas 'die Brunst [heat]' (ME III 487) or Latv. adjectives rauns 'böse, tückisch [malicious, vicious]' (ME III 487), raûns 'gross [large]' (EH II 358). It seems that both etymons - Finnic and Baltic - are possible for these Latvian toponyms.

4. Conclusion

Identification of possible Finnicisms in Baltic territories, especially in contemporary Latvia, relies on several types of criteria. Of those, the most speculative are phonetic criteria (see 1.2). Morphological criteria are less speculative (see 1.3) (though there is possible suffix homonymy). The most solid loanword etymologies are based on lexical criteria (see 1.1) (although these can also be misleading). The credibility of the hypothesis of Finnic origin increases when there is the combination of two (or all three) of the criteria mentioned above. The location of the named object and clear parallels in Finnic onomastic material make the credibility of the borrowing much stronger. However, there are many dubious cases in which several possible explanations of the origin of the toponym are available.

The map of location of the possible toponyms under review testifies, that they are mostly spread in western and northern part of Latvia. The others (especially in the southern part) can be so called indirect Finnicisms coined from Latvian appellatives which in turn are Finnic loanwords or from Latvian surnames of Finnic origin.

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Summary

Laimute Balode

Identification of all possible Finnicisms, viz. Finnic substrate elements and Finnic borrowings, in Latvian toponymy should start with criteria for identifying potential borrowings. These criteria can be classified variously as lexical, phonetic, and morphological.

Lexical borrowings comprise the largest group. These are names that have entered the Latvian toponymicon from the Livonian and Estonian languages. Clear parallels between Lavian place-names and Estonian or Finnish place-names allow more confident identification of potential borrowings. Lexical borrowings also include the so-called indirect or relative Finnicisms, i.e., Latvian toponyms coined from Latvian appellatives which in turn are borrowed Finnic words.

Generally accepted phonetic "signs" of Finnicisms are the diphthongs -oi- and -ui- (Poikas, Soidu ezers, Uikas ezers), as well as the rare sequence -or- (Porka), and sometimes also the consonant k in the position before front vowels (Keldas ezers, Kidurga).

Morphological criteria for identifying potential Finnicisms pose the greatest challenge. Previous studies viewed the toponymical formants $-a\check{z}i$, $-u\check{z}i$, $-i\check{z}i$ as morphological markers of Finnicisms. (A new hypothesis on the origin of these formants is provided in the article.) Compound toponyms with the second part -(j)eris, $-(j)\bar{e}ris$ or -(j)ieris< Liv. $j\bar{o}ra$ ($j\ddot{a}ru$), Est. $j\ddot{a}rv$ 'lake', and -kila, -kile, -kule < Liv., Est. $k\ddot{u}la$ 'village' also point to a Finnic origin.

Place-names that combine at least two (or all three) of the criteria mentioned above can be considered the most plausible Finnicisms. Phonetic criteria are the most speculative; morphological criteria are more solid; but the strongest criteria are lexical (although these can also be misleading). However, there are many dubious cases, in which several possible explanations of the origin of the toponym are available.

Kopsavilkums

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Lai noteiktu visus iespējamos somugrismus Latvijas toponīmijā, jāsāk ar kritērijiem, kas norāda uz potenciālo aizguvumu. Visi kritēriji varētu tikt iedalīti: leksiskajos, fonētiskajos un morfoloģiskajos. Leksiskie aizguvumi visupirms pievērš uzmanību kā "svešķermeņi" latviešu valodas sistēmā. Tie ir vārdi, kas ir ienākuši latviešu toponīmijā no lībiešu un igauņu valodas. Skaidras paralēles starp latviešu un igauņu vai somu vietvārdiem ļauj drošāk identificēt potenciālo aizguvumu. Jāmin arī netiešie somugrismi, resp., Latvijas vietvārdi, kas darināti no latviešu apelatīviem, kam savukārt ir somugriska izcelsme.

Kā vispāratzītas fonētiskās somugrismu "pazīmes" var uzskatīt diftongus -*oi*-,-*ui*- (*Poikas*, *Soidu ezers*, *Uikas ezers*), kā arī retāk sastopamās skaņu kopas -*or*- (*Porka*). Dažkārt tas varētu būt arī līdzskanis ķ pirms priekšējās rindas patskaņiem (Ķeldas ezers, Ķidurga).

Vislielākā nenoteiktība, lūkojoties pēc potenciālo somugrismu morfoloģiskajiem kritērijiem. Vairākos pētījumos par tādām tiek uzskatītas toponīmiskās izskaņas *-aži, -uži, -iži* (šajā rakstā tiek izvirzītas jaunas cilmes hipotēzes). Atsevišķi jārunā par salikto toponīmu otrajiem komponentiem *-(j)eris, -(j)ēris* vai *-(j)ieris <* līb. *jōra (järu)*, ig. *järv* 'ezers' kā arī *-kila, -kile, -kule <* līb., ig. *küla* 'ciems'. Par visticamākajiem aizguvumiem no somugru valodām var uzskatīt tādus Latvijas vietvārdus, kas apvieno vismaz divus (vai pat trīs) no iepriekš minētajiem kritērijiem. Aizguvumu ticamība kļūst augstāka, ja objekta lokalizācija ir bijušajās lībiešu apdzīvotās teritorijās vai arī netālu no Igaunijas robežas.

Vishipotētiskākie ir fonētiskie kritēriji, mazāk hipotētiski – morfoloģiskie (lai gan iespējama arī izskaņu homonīmija), bet nosacīti lielāka ticamība ir leksikajiem kritērijiem (lai gan reizēm arī šis kritērijs var būt maldinošs). Jāspiebilst, ka ir daudzi Latvijas vietvārdi, kuru cilme ir neskaidra, tomēr viena no varbūtībām – somugriskā izcelsme. Aizguvumu uzrādīšana ir viens no *Latviešu valodas vārdnīcas* autoru uzdevumiem.

Tiivistelmä

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Suomalais-ugrilaisten ainesten tunnistaminen Latvian paikannimistössä tulee aloittaa kriteereistä mahdollisten lainojen tunnistamiseksi. Kriteerit voidaan jakaa leksikaalisiin, foneettisiin ja morfologisiin. Leksikaaliset eli sanalainat herättävät huomiota "sveškermeņi" latvian kielisysteemissä. Nämä ainekset on saatu latvialaisiin paikannimiin liivin ja viron kielistä. Selvät paralleelit latvialaisten ja virolaisten tai suomalaisten paikannimien välillä kielivät suhteellisen varmoista lainatapauksista. Epäsuoriksi suomalais-ugrilaisiksi aineksiksi nimitetään latvialaisia paikannimiä, jotka on muodostettu latvian kielen appellatiiveista, joilla on itämerensuomalainen laina-alkuperä.

Yleisesti hyväksyttyjä foneettisia merkkejä itämerensuomalaisesta alkuperästä ovat diftongit -*oi*- ja -*ui*- (*Poikas, Soidu ezers, Uikas ezers*) sekä harvinainen -*or*-yhtymä (*Porka*). Eräissä tapauksissa myös <u>k</u> etuvokaalin edellä juontuu itämerensuomesta (<u>Keldas ezers, Kidurga</u>).

Suurimmat epävarmuustekijät suomalais-ugrilaisten ainesten tunnistamisessa liittyvät morfologisiin kriteereihin. Useissa tutkimuksissa niihin on luettu paikannimenpäätteet -*aži*, -*uži* ja -*iži*. (Artikkelissa esitetään uusi hypoteesi näitten ainesten alkuperästä). Yhdyspaikannimet, joitten perusosana on *(j)eris*, *(j)ēris*, -*(j)ieris* < li. *jõra (järu*), vi. *järv* tai -*kila*, -*kile*, -*kule* < li., vi. *küla* viittaavat varmemmin itämerensuomalaislähtöisyyteen. Varmimpia itämerensuomalaisia lainoja ovat ne Latvian paikannimet, jotka täyttävät yllä mainituista kriteereistä vähintään kaksi (tai kaikki kolme). Lainaselitykset ovat uskottavimpia entisillä liiviläisalueilla ja lähellä Viron rajaa.

Hypoteettisimpia ovat foneettiset kriteerit, vähemmässä määrin morfologiset. Uskottavimpia ovat leksikaaliset kriteerit (vaikka nekin voivat joskus johtaa harhaan). Latviassa on kuitenkin paljon paikannimiä, joitten alkuperä on epäselvä, jolloin suomalais-ugrilainen lainaselitys on yksi monista vaihtoehdoista. Artikkelin yhtenä tehtävänä on punnita näitä selitysvaihtoehtoja.

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Surnames of Finnic Origin in Latvia

Introduction

As an introduction to anthroponymic Finnicisms in Latvia, a short history of Latvian surnames in general is given. This will help to understand how Finnicisms have become part of Latvian anthroponymic system.

It is generally accepted that the surnames in Latvia, as in Estonia, appeared very late compared to the rest of Europe. Records indicate that surnames only came into use at the beginning of 19th century; for example in 1826 in Vidzeme (North Central part of Latvia), in 1835 in Kurzeme (Western part of Latvia) and in 1866 in Latgale (Eastern part of Latvia) (Upelnieks 1936: 225; Staltmane 1981: 7). However, according to studies by Ernests Blese (1929), it appears that surnames were used in the cities, especially in Riga, much earlier (already in the 15th–16th centuries). The latest archive document studies also testify that Latgalian surnames were recorded already at the end of the 16th century (Stafecka 2013; Škutāns 1974).

Surnames in Latvia appeared not only in their natural way – majority of surnames were assigned artificially, especially in the 19th century, when significant changes took place in Latvian anthroponymy. After the abolishment of serfdom at the beginning of the 19th century it was required by law that all peasants must have surnames (Upelnieks 1938; Staltmane 1981). Until then persons – as in almost all Europe – were identified by their first name, patronym, nickname, family status, profession or – very often – by the name of the homestead where they lived. However, when changing place of residence, this system often collapsed and the need to have a more reliable basis for naming - constant surname – became evident. This change was closely connected also with hereditary rights (Plakans, Vezerels 2003: 31).

In choosing a surname, often the homestead owners used to take the name of their homestead. However, during the official process of giving of the surname the clerks or scribes often changed the homestead name, Germanized it or sometimes even vulgarized it. For example, inhabitants from the homestead named *Plahzen* (Latv. *plācenis* 'flat breadlike cake'), were given the surname *Pihrags* (Latv. *pīrāgs* 'pie') (Upelnieks 1938, 276). Also the clerks often gave out two-stem surnames with German components or used German names for professions as surnames. Examples of Latvian surnames originated from German names of professions are *Šmits* (Germ. *Schmied* 'blacksmith'), *Millers* (Germ. *Müller* 'miller'), *Obermanis* (Germ. *Obermann, Ober* 'waiter'), *Šneiders* (Germ. *Schneider* 'dressmaker'), *Ģēģeris* (Germ. *Jäger* 'hunter'). They are still in wide use in Latvia. On the whole the amount of Latvian surnames of German origin is rather large.

There are also rather many two stem surnames – onomastic hybrids – having Latvian root (omitting ending) as the first component and a German root (adding Latvian grammatical ending) as the second component. For example, the second component *-sons* (Germ. patronymic *Sohn* 'son') in *Klavsons* (Latv. appellatives *klava* 'maple'), in *Vilksons* (Latv. *vilks* 'wolf'); the second component *-manis* or *-mans* (Germ. *Mann* 'man') in *Augstmans* (Latv. *augsts* 'high; tall'), *Graudmans* (Latv. *grauds* 'grain'), *Dižmanis* (Latv. *dižs* 'great'), *Upmanis* (Latv. *upe* 'river'), *Laukmanis* (Latv. *lauks* 'field'); the second component *-bergs* (Germ. *Berg* 'mountain, hill') in *Krūmbergs* (Latv. *krūms* 'bush'), *Kalnbergs* (Latv. *kalns* 'hill'; the second component *-valds* (Germ. *Wald* 'forest') in *Jaunvalds* (Latv. *jauns* 'new'); and the second component *-felds* (Germ. *Feld* 'field') in *Jānfelds* (Latv. personal name *Jānis*).

There are also indirect Germanisms in Latvian surnames which coined from Latvian appellatives of German origin. For example, *Brūzis* (Latv. *brūzis* 'brewery' < Germ. *Brauhaus*), *Zoste* (Latv. *zoste* 'sauce' < Germ. dial. *Soost* ME IV 760), *Lielšvāģers* (Latv. *liels* 'large, big' and *švāģers* 'brother-in-law' < Germ. *Schwager*), *Skrīveris* (Latv. *skrīveris* 'scribe' < Est. *krīwel* < Germ. dial. *Schriver* ME III 896), *Stūrmanis* (Latv. *stūrmanis* 'wheelman'< Germ. *Steuermann*, Germ. dial. *Stûrman* ME III 1110). According to onomastic literature most compound surnames have entered the Latvian language by calquing German surnames. However, part of Latvian compound surnames may be derived in Latvian language from the place names, which in turn are compound names. In addition, there are many compounds in Latvian on the appellative level, and many Latvian surnames in their turn are coined from them.

In the second part of the 19th century, when the national awakening started in Latvia, the so-called Neo-Latvians recommended to Latvianize names and surnames. This process continued during the years of Independence of Latvia and became very active in the 1930s and 1940s when many Germanisms were Latvianized, resp. changed to surnames of Latvian origin, often as calques. For example,

Altbergs > Veckalns 'old' + 'hill', Blūmbergs > Puķkalns 'flower' + 'hill', Veisbergs > Baltkalns 'white' + 'hill', Frīdbergs > Mierkalns 'peace' + 'berg', Lindenbergs > Liepkalns 'lindentree' + 'hill', Zonnenbergs > Sauleskalns 'sun' + 'hill', Freifelds > Brīvlauks 'free' + 'field', Rozenfelds > Rožlauks 'rose' + 'field', Birkentāls > Bērzleja 'birch-tree' + 'dale, valley', Blūmentāls > Puķuleja 'flower' + 'dale, valley', Frīdentāls > Mierleja 'peace' + 'dale, valley', Švarcbahs > Melnupe 'black' + 'river', Perlbahs > Pērļupe 'pearl' + 'rivulet', Grīnblats > Zaļlapa 'green' + 'leaf', Rozenblats > Rožlapa 'rose' + 'leafe', Hāzenfūss > Zaķkājs 'hare' + 'leg, foot', Kuperšmits > Varkalis 'copper' + 'smith', etc. (see also Staltmane 1981: 69).

Thus, today we can find in Latvia surname of German origin as well as its calque – (e.g. *Rozenblats* and *Rožlapa*). It is even possible that members of the same family have the German form of the surname while other members have the Latvianized form of the surname.

The second largest etymological group of Latvian borrowed surnames are anthroponyms of Slavonic origin. In the Eastern part of Latvia (Latgale) many persons have Slavonic surnames or surnames with a Polish or Russian suffix. This reflects the nationality of many of landlords and clerks at the time in Latgale. The most spread surnames with Slavonic suffixes nowadays are:

- -skis, -ckis (much less than -skis): Dombrovskis, Jankovskis, Kaminskis; Belickis, Namickis, Zemlickis). There are recorded also surnames hybrids which are of special interest, e.g.: Celmiskis < Latv. celms 'stump', Eglinskis < Latv. egle 'fir-tree', Klavinskis < Latv. klava 'maple', Mežinskis < Latv. mežs 'forest';</p>
- -evičs, -evics (more popular than -evičs): Jurevičs, Jurevics < Latv. first-name Juris, Jankevičs, Jankevics < Latv. first-name Janka. There are examples there Slavonic suffixes are added to Latvian roots: Gudrevics < Latv. gudrs 'clever', Puķevics < Latv. puķe 'flower', Skujevics < Latv. skuja 'needle';</p>
- -ovs (rather popular), -evs (very few surnames): Petrovs, Volkovs, Stalbovs; Gusevs, Jurcevs; -aus (modified suffix -ovs): Brunaus, Detlaus, Markaus, Jankaus (see also Staltmane 1981: 77–82).

Other Latvian surnames have a Lithuanian origin – mostly with suffixes -aitis, -ūns, -utis, -išķis (e.g. Adamaitis, Linkaitis, Guraitis; Abrazūns, Veršūns, Miļūns; Matutis, Elgutis; Alutis, Sukuts; Kalnišķis, Kalvišķis, and Pakalnišķis), and some even of Italian and French origin (e.g. Martinelli, Rosini, Martini, Konrādi, Pandaloni, Andrē, Manjē).

In conclusion Latvian surnames have several etymological origins: Germanic (German, Sweden), Slavonic (Russian, Belorussian, Polish), Lithuanian, very few even Italian and French, besides of Finnic (Estonian, Finnish, Livonian?) origin. Surnames of Latvian or Baltic origin account for about 34% of all contemporary Latvian surnames (Staltmane 1981, 39–40).

1. Surnames of Finnic origin

Although a number of studies on the connection between Finnic and Latvian language have been carried out (Būga 1923; 1924; Zeps 1962; Rudzīte 1968; Breidaks 1973; 1989; Kagaine 2004; Bušs 2009, etc.), anthroponymic studies on the borrowing and origins of surnames have been few. Lembit Vaba (Vaba 1977: 2002) has written about surnames of Latvian origin in Estonia, and Ojārs Bušs (Bušs 1993) about

possible Latvian surnames in Finland. The anthroponymical material used in this article has been collected over several years from the Riga telephone directory and excerpted from the Reverse Dictionary of Latvian Surnames compiled by Velta Staltmane (Staltmane 1981). Mainly the surnames were chosen on the basis of lexical comparison with Finnic appellatives and onyms, but sometimes the phonetic peculiarities were also taken into account as additional features of possible borrowing. From the scientific point of view the sample is rather subjective but is rather extensive. It was not possible to interview the owner of the surname in order to check nationality or to learn about the history of the anthroponym, but the first name of the person sometimes helped to decide on the possible nationality.

The material reflects the contemporary anthroponymic situation in Latvia. Demographic data from the year 2011 show that there are only 2007 Estonians currently living in Latvia (compared 17 991 in 1897, 8701 in 1920, 3312 in 1989). In 2000 there lived 2677 Estonians in Latvia, of which 1024 were resident in Riga (Aivare 2000). There are no data about Finns permanently living in Latvia.

Latvian surnames borrowings from the Finnic languages can be classified as names borrowed from the Estonian language, from the Finnish language or from both the Estonian and Finnish languages (names used in both languages). It is difficult to identify separately about borrowings from Livonian. While there are some first-names of Livonian origin (e.g. *Imants, Aiga*), surnames of Livonians were mostly of German or Latvian origin.

1.1. Surnames having a Finnic lexical etymon

The lexical meaning of etymons can indicate the possible Finnic origin of surnames in Latvia. The semantics of proper names is rather controversial in onomastic theory because onyms are perceived only as signs, but one can look to the primary or etymological semantics as an aid, as done in this study. In analyzing Latvian surnames, it is first important to find analogical surnames in Estonian/Finnish languages, and secondly to ascertain possible etymons (etymon – a word or morpheme from which a later word is derived) of Estonian/Finnish origin that the surnames were coined from. Examples of Latvian surnames with comparison to Estonian/Finnish surnames and comparison with their possible etymons are given in the list below:

- Ilves¹ (Gunārs) (Ilve Inese, also Ilvess Gunārs, Ilvesa Alma) 5x Riga; Est. Ilves 83x Tallinn; Finn. Ilves 38x Helsinki. Cf. Est., Finn. ilves 'lynx'.
- *Ilmets* (Egils) 1x Riga; Est. *Ilmets* 4x Tallinn; Finn. –. Cf. Est. *ilmet* 'the look, appearance'?
- *Innus* (Gunārs, Gunta) 5x, *Innuss* (Aivars) 25x Riga; Est. *Inno* 6x, *Innos* 7x Tallinn; Finn. –. Cf. Est. m. first names *Innu*, *Hinnu*, *Hinn(e)*, *Hinn(o)* < *Heinrich* (Seppo 1994: 57).
- Kajaks (Gunārs) (Kajaka Dzidra) 12x Riga; also Kaijaks. Cf. Est. Kajak 10x Tallinn; Finn. Kajakka 3x, Kajakko 1x Helsinki. Cf. Est. kajakas 'gull' (appellative of Finnic origin is known also in Latvian: kajaks I 'Raubmöwe' ME II 136, though it is not a widespread lexeme).
- *Karma* (Rūta) 1x Riga; Est. *Karm* 10x, *Karma* 7x Tallinn; Finn. *Karm* 4x, *Karma* 10x, Helsinki. Cf. Est. *karma* 'harsh, rough'.
- *Katajs* (Ivars) (*Kattajs* Edgars) 3x Riga; Est. *Kattai* 16x Tallinn; Finn. *Kataja* 126x Helsinki. Cf. South Est. *kat(t)ai* 'juniper', Finn. *kataja* 'idem'.
- *Kaukulis* (Juris) (*Kaukule* Brigita) 4x Riga; Est. *Kauküla* 2x, *Kauküll* 2x Tallinn, Finn. –.

^{1.} In this list a first name is also given next to the surname which sometimes helps determine a person's ethnicity, as well as surname frequency recorded in the Riga 1999–2000 telephone directory, then compared with the relevant surname in Estonia (Tallinn 1998 telephone directory) and Finland (Helsinki 1998 telephone directory), indicating the frequency. At the end of the comparison the possible etymon – Finnic appellative is given.

- Kilpis (Ivo) 1x Riga; Est. Kilp 8x, Kilps 1x Tallinn; Cf. Finn. Kilpi 4x, Kilpinen 1x, Kilpimaa 1x Helsinki. Cf. Est. kilp, Finn. kilpi 'shield' ? or also Finn. dial. kilpi 'part of reindeer horn', kilpi 'waterlily'.
- Koska (Malvīne) 5x Riga; Est. Kosk 15x, Koska 1x Tallinn; Finn. Kosk 10x, Koski Helsinki. Cf. Est. kosk, Finn. koski 'rapids'.
- *Kulms* (Leons) (*Kulme* Marija) 2x Riga; Est. *Kulm* 10x Tallinn; Finn. –. Cf. Est. *kulm* 'brow, eyebrow'.
- *Kuningas* (Aivars) 1x Riga; Est. *Kuning* 3x, *Kuningas* 22x Tallinn; Finn. *Kuningas* 13x Helsinki. Cf. Est. and Finn. *kuningas* 'king'.
- *Kūrs* (Herberts) (*Kūriņš* Vilnis) 1x Riga, 235; Est. *Kuur* 6x Tallinn; Finn. *Kuure* 3x, *Kuuri* 4x Helsinki. Cf. Est. *kuur* 'shed; cure', but cf. also Latv. dial. *kūris*, *kūrs* 'ein Netz /net/' ME II 337.
- *Laine* (Viktors, Lilita) 3x Riga; Est. *Laine* 10x, Tallinn; Finn. *Laine* 1570x Helsinki. Cf. Est., Finn. *laine* 'wave'.
- Lehmusa (Aina) 2x Riga; Est. Lehmus 87x, Tallinn; Finn. Lehmus 51x Helsinki. Cf. also Finn. Lehmuserä, Lehmusheimo, Lehmusjoki, Lehmusjärvi, Lehmuskallio, etc. Helsinki. Cf. Est. lõhmus, Finn. lehmus 'linden'.
- *Lehta* (f.) (and *Lehte* Zinaīda, Gaida) 2x Riga; Est. *Leht* 25x Tallinn; Finn. *Lehti* 125x, *Lehtamo* 5x, *Lehtelä* 22x Helsinki. Cf. Est. *leht*, Finn. *lehti* 'leaf'.
- *Lehtla* (Inta) Riga; Est. *Lehtla* 13x Tallinn; Finn. . Cf. Est. *leht* 'leaf', *lehtla* 'arbor'?
- *Leinasars* (*Leinasare*, *Leinasāre*) (Jānis, Ingrīda) 5x Riga; Est. *Leinasaar* 3x Tallinn; Finn. –. Cf. Est. *leina* 'mourning'?

- *Leps* (Andrejs, Ināra) 11x un *Lepsis* (Ojārs) Riga; Est. *Leps* 4x Tallinn; Finn. *Leppä* Helsinki. Cf. Est. *lepp*, Finn. *leppä* 'alder'.
- *Lepiks* (*Lepika*, *Leppeks*, *Leppika*) 8x Riga; Est. *Lepik* 93x, *Leppik* 44x Tallinn; Finn. *Lepik*, *Lepikko* 2x, *Leppik* 3x Helsinki. Cf. Est. *lepik*, Finn. *lepikko* 'alder forest'.
- Luiks (Luika; Viktors, Anda) Riga; Est. Luik 101x, Luiks 2x Tallinn; ? Finn. Luikko 4x, Luikku 3x Helsinki. Cf. Est. luik, luige 'swan' (Finn. surnames of another origin – see Mikkonen, Paikkala 2000, 319).
- *Luts* (Jurijs, *Lutsa* Aīda) 3x Riga; Est. *Luts* 38x Tallinn; Finn. –. Cf. Est. *luts*, Gen. *lutsu* 'burbot'.
- Musts (Jānis, Muste Lilija) 6x Riga; Est. Must 31x Tallinn. Cf. Finn. composites Mustajoki 14x, Mustajärvi 14x, Mustakallio 55x, Mustakala 9x Helsinki. Cf. Est. must, Liv., Finn. musta 'black'.
- Nuka (Modris) 3x, Nukke (Elza) 1x, cf. Nuke, Nukis Riga; Est. Nuka 6x, Nukk 7x, Nukka 4x, Nukke 3x Tallinn, Finn. –. Cf. Est. nukk, Gen. nuku (dial., colloq. nuka), Finn. nukke 'doll', or South Est. nukk, Gen. nuka 'corner'.
- *Ojavere* (Jānis, Alma) 4x (also *Ojāvere* 1x) Riga; Est. *Ojaveer* 6x, *Ojaver* 2x, *Ojavere* 7x Tallinn, Finn. –. Cf. Est. *oja* 'brook' and *veer* 'ledge, brink'.
- *Paema* (Juris) 1x Riga; Est. *Paemaa* 1x Tallinn, Finn. –. Cf. Est. *pae*, *paas* 'limestone'+ *maa* 'land'.
- Pajula (Ēriks) 1x Riga; Est. Pajula 32x Tallinn, Finn. Pajula 43x Helsinki. Cf. Est., Finn. paju, 'willow', also Finn. pajula 'backwater'.
- **Pedajs** (Gunārs) 1x Riga; Est. *Pedaja* 8x, *Pedajas* 8x Tallinn, Finn. –. Cf. Est. *pedajas*, dial. *pedaja*, *petäi*, Gen. *pedäjä*, Finn. *petäjä* 'pine-tree'.

- Pēde (Irēna, Juris) 4x Riga; Est. Peedi 1x, Peedis 1x, Peedo 6x Tallinn, Finn. –. Cf. Est. anthroponym Peedo < Peeter < Peter < Latin Petrus (Seppo 1994: 103).
- *Piks* (Rihards, Johans) 4x (cf. *Piko* Anna 1x) Riga, Est. *Pikk* 15x, *Pikko* 1x Tallinn 134, Finn. –. Cf. Est. *pikk*, Gen. *pika* 'long'.
- Puka (Ēriks, Viktorija) 3x Riga; Est. Pukk 71x, Pukko 2x Tallinn, Finn. Pukka 1x Helsinki. Cf. Est. pukk, Gen. puki 'buck', Finn. pukki 'idem'.
- Punga (Daira, Normunds) 5x Riga; Est. Pung 7x, Punga 3x, Pungas 10x Tallinn, Finn. –. Cf. Est. pung, Gen. punga 'bud', Finn. dial. punk 'idem'.
- *Raudzeps* (Ilmārs, Ilgonis) 2x Riga, *Raudzepa* (Alvīna, Erika) 3x, Est. *Raudsepp* Tallinn. Cf. Est. *raudsepp* 'blacksmith'.
- Sarja (Ivars, Lilija) 3x Riga; Est. Sarja Tallinn, Finn. Sarja Helsinki. Cf. Est. sarja, Finn. sarja 'row, line, chain' – perhaps surname of toponymical origin ('houses in the row') (Mikkonen, Paikkala 2000: 587).
- 1.2. Finnicisms according to the form of the surname

The inflexible form of the surname (ending with -o or -i) in Latvian can indicate the possible borrowings. The following list gives examples of Latvian surnames having possible borrowing from Finnic languages based on the inflexible form.

- Janno (Rolands) 1x Riga; Est. Janno 3x Tallinn; Finn. –. Cf. Est. anthroponym Jann(o) < Johannes (Seppo 1994: 69).
- *Kairo* (Pēteris, Irēna) 2x Riga; Est. *Kairo* 4x Tallinn; Finn. *Kaira* 19x, *Kairo* 3x Helsinki.

- *Kangro* (Andris, Ilze) 3x Riga, Est. *Kangro* 33x Tallinn, Finn. –. Cf. Est. *kangur*, Gen. *kangru* 'weaver'.
- *Karro* (Aleksandrs, Dzidra) 4x Riga; Est. *Karro* 30x Tallinn; Finn. *Karro* 6x Helsinki. Maybe ancient writing system form from Est. *karu* 'bear'?
- *Koiro* (Antons) 2x Riga; Est. –; Finn. *Koiranen* 13x Helsinki. Cf. Finn. *koira* 'dog'?
- *Konno* (Igors, Tamāra) 6x Riga; Est. *Konno* 7x Tallinn; Finn. *Konno* 4x Helsinki. Possibly it comes from South Est. *kond*, Gen. *konno* 'forest', 'meadow', 'unsuitable land'.
- *Kumari* (Ināra) 1x Riga; Est. *Kumar* 1x, *Kumari* 6x Tallinn; Finn. *Kumar* 4x Helsinki.
- Megi (Harijs, Lidija) 4x Riga; Est. Mäggi 3x, Mägi 214x Tallinn, Finn. Mäki 111x. Cf. Est. mägi, Gen. mäe 'mountain, hill', Finn. mäki 'idem'.
- *Mjagi*, *Mjaggi* (Pjotrs, Nadežda) 3x Riga; Est. *Mäggi* 3x, *Mägi* 214x, Tallinn, Finn. *Mäki* 111x. Such modified form of a surname suggests that it has entered Latvian language through Russian. Also first names allow considering that these persons are immigrants from Russia (maybe Ingrians?). See also s. v. *Megi*.
- Pallo (Daiga, Jānis) 10x Riga; Est. Pallo 9x Tallinn, Finn. –. Cf. pallo in Est. old writing system, contemporary form Est. palu, South. Est. palo 'pine forest'?

Sometimes the ending -e (for m.g.) testifies about possible borrowings:

Kelle – (Anita, Elmārs) 7x Riga; Est. *Kell* 16x, *Kelle* 3x Tallinn; Finn. *Kella* 4x, *Kellas* 3x, Helsinki. (Though, this could also be an anthroponym of Germanic origin).

Ojavere (4x) (see above s. v. Ojavere).

Olle – (Leonīds, Ginta) 3x Riga; Est. *Olle* 2x, *Oll* 9x, *Olla* 2x Tallinn, Finn. –. Cf. Est. first name *Oll(e)* < *Olaf* (Seppo 1994: 100).

Several Latvian surnames of credible Finnic origin are recorded in their original form (or close to it), for instance:

Alamaa – (Maiga) 1x Riga; Est. Alamaa 12x Tallinn; Finn. Alamaa 1x Helsinki (in particular case the owner of the surname is Estonian, i.e. Estonian's wife, although the surname is known also in Finland).

Kalaus - (Ausma) 1x Riga; Est. Kalaus 3x Tallinn; Finn. -.

- Saars (Fēlikss) 2x Riga; Est. Saar, Finn. Saari. Cf. Est. saar, Finn. saari 'island'.
- Many surnames in the list of telephone directory lack Latvian endings:

Krull - (Alfons) 1x Riga; Est. Krull 10x, Tallinn; Finn. -.

Lassi – (Regīna) Riga; Est. Lassi 3x Tallinn; Finn. Lassi 6x Helsinki.

Luhtanen – 2x Riga; Est. –; Finn. Luhtanen 36x Helsinki.

1.3. Adaptation of Finnic surnames in Latvian

Many Finnic surnames have been adapted to the Latvian language (according to Latvian legislation) by adding a Latvian ending. Accordingly a Finnic root can be recognised in the following Latvian surnames: *Lepiks*, *Kūsiks*, *Kampuss*, *Karjuss*, *Leinasars*, *Luiks*, *Musts*, *Piks*, etc. Sometimes a Latvian diminutive suffix is added to the Finnic root, such as in:

Karnītis – cf. (?) also Est. *Karna*, Latv. *Karnups*, but also one of the possibilities is that Latv. surname *Karnītis* is a transformed

form from Est. *Karnits*. There is also well-known Latv. adjective $k\bar{a}rns$ [with long vowel $-\bar{a}$ -] 'ausgehungert, hager, magern [skinny]' ME II 163 which could be another etymological possibility of the surname.

- *Krēķītis* cf. Est. *Kreek*, Est. *kreek* 'blackthorn', but very possible also connection with Latv. *krēķis* 1. 'der Tannen- od. Nusshäher [blackthorn]'; 2. 'eine Pflaumenart [plum]' ME II 275.
- *Kriķīte* f. g. cf. Est. *Krik*, or *Kriik*, Finn. *Kriikku*, but cf. also Latv. dial. *kriķis*, *kriķītis* 'die Krickente [teal]' ME II 279 or South Est. *kriik*, Gen. *kreegi* 'blackthorn'.

Puidīte f. g. - cf. (?) Est. Puidet, Puidak.

Rather many hybrid forms – consisting of Finnic root and Latvian suffix – were coined in such way.

Borrowed surnames in Latvian often are recorded and practically used in various parallel forms: *Lepiks, Leppeks, Leppiks* – cf. Est. *Lepik, Leppik; Leps, Lēps, Lepps, Lepis, Lepsis, Lepe, Leppe, Lepo* – cf. Est. *Leps, Lepa; Katajs* and *Kattajs* – cf. Est. *Kattai*, Finn. *Kataja; Rebans, Rebainis* – cf. Est. *Rebane; Ojavere* and *Ojāvere* – cf. Est. *Ojavere; Tamisārs* and *Tammisārs* – cf. Est. *Tammisaar, Tammsaar*, etc.

1.4. Finnish surnames in Latvian

Aforementioned Latvian surnames of possible Finnic origin make a card-index of approximately 220 anthroponyms, of which about 100 could be borrowed from Estonian and a further 100 borrowed from Estonian/Finnish names, i.e. they are common to both languages and used in both anthroponymic systems. Therefore only a few surnames directly of Finnish origin appear in Latvia, and in all cases the surname owners had first names that indicated that they were not Latvians, but either new-comers or visitors. These surnames included *Karhu* (5x), *Kempainen* (1x), *Kokkonen* (2x), *Kuivanen* (1x), *Luhtanen* (3x). As these surnames have not been adopted into Latvian, they are not analysed in this article as a part of Latvian anthroponymy.

1.5. Estonian as mediator language

The Estonian language in some cases could be the mediator language for surnames from other languages, mainly from German or Swedish (there is often a parallel Germanism), for example:

- *Alpa* 4x Riga, cf. Est. *Alp*, Finn. *Alppi* < Germ. personal name *Albrecht*, *Albert*.
- *Kustavus* 3x Riga, cf. Est. *Kustavus*, cf. Sw. personal name *Gustaf*. Often even phonetics of the name confirms the direction of borrowing.
- Kuningas (Aivars) 1x Riga; Est. Kuning 3x, Kuningas 22x Tallinn;
 Finn. Kuningas 13x Helsinki. Cf. Est. and Finn. kuningas 'king'
 < *kuningaz, contemporary forms Germ. König and Sw. konung or kung (Häkkinen 2009: 508).
- Piuss (Ilgvars) (Piu Andris) 2x Riga; Est. Pius 4x Tallinn, Finn. –. Cf. Latv. personal name Pijus – very rare name of Latin origin (Siliņš 1990: 262).

There are many surnames common in Latvian and Estonian anthroponymic systems. Though both languages have borrowings from the German language, it appears that some are borrowings to Latvian through Estonian or vice versa, for instance:

- Latv. Arents Est. Arand, Arandi, Arend, Arende, Arendi Finn. Arenta, Arento, cf. Germ. Ahrend(t)s (Kohlheim 2000: 80).
- Latv. Baars Est. Baar, cf. Germ. Bahr (Naumann 1989: 60).
- Latv. Einers Est. Einer, cf. Germ. Einer (Naumann 1989: 99).
- Latv. *Elers*, *Ellers* Est. *Eller* Finn. *Elers*, cf. Germ. *Eller* (Linnartz 1958: 61).

- Latv. *Elmeris* Est. *Elmers*, cf. Germ. *El(l)mer* (Heintze, Cascorbi 1967: 183).
- Latv. *Elsters* Est. *Elster*, cf. Germ. *Elster* (Heintze, Cascorbi 1967: 183).
- Latv. Kipers Est. Kipper, cf. Germ. Kipper (Linnartz 1958: 115).
- Latv. *Īle* Est. *Iila* Finn. *Iili*, cf. Germ. *Ihl(e)* (Naumann 1989: 151).
- Latv. Kohs Est. Koh Finn. Kohi, Koho, cf. Germ. Koch (Linnartz 1958: 122).
- Latv. Kolls Est. Koll, Kolle Finn. Kolli, cf. Germ. Koll(e) (Naumann 1989: 171).
- Latv. Korns Est. Korn Finn. Korn, cf. Germ. Korn (Naumann 1989: 173).
- Latv. Krebs, Krebss, Krēbs Est. Krebs, Krebes Finn. Krebs; cf. Germ. Krebs (Naumann 1989: 177).
- Latv. Kresa, Kresse, Kresse Est. Kress, Kressa Finn. Kress, cf. Germ. Kress(e) (Naumann 1989: 177).
- Latv. Krols, Krolls, Krollis Est. Krol, Kroll Finn. Kroll; cf. Germ. Krol(l) (Naumann 1989: 179).
- Latv. *Kempe* Est. *Kemp*, *Kempa* Finn. *Kempe*, cf. Germ. *Kemp(e)* (Linnartz 1958: 113).
- Latv. Manga Est. Mang, Mango Finn. Mangs, cf. Germ. Mang (Heintze, Cascorbi 1967: 337).
- Latv. *Mats* Est. *Matt* Finn. *Mata*, cf. Germ. *Matz* (Heintze, Cascorbi 1967: 342).

- Latv. Mende Est. Mänd Finn. Mende, Mendes, Mänd, cf. Germ. Mende (Naumann 1989: 204).
- Latv. Palms Est. Palm Finn. Palmio, Palmu; cf. Germ. Palm (Heintze, Cascorbi 1967: 377).
- Latv. Pāls Est. Paal, cf. Germ. Pahl (Heintze, Cascorbi 1967: 377).

1.6. Indirect Finnicisms

There are Latvian surnames which could be considered as relative or conventional Finnicisms, that is, surnames coined from Latvian appellatives which in turn are borrowings from Finnic languages. The following Latvian surname examples:

- Joma (Jānis, Daiga) 3x Riga; Est. Jomm 4x Tallinn 44; Finn. –. Cf. Latv. appellative of Finnic origin *joma* 'die Tiefe zwischen zwei Landbänken [inlet]' < Liv. *juom* 'tieferes Wasser zwischen Landbänken [deeper water between land Banks]' ME II 126.
- Meija (Agris, Anita) 20x Riga; Est. Mei 6x Tallinn, Finn. –. Cf. Latv. appellative of Finnic (or German) origin meija 'die Maie, ein Zweig, ein Büschel von Zweigen [a tuft of branches, birchbough]' ME II 591.
- Paije (Elza, Vilnis) 2x Riga; Est. Pai 5x Tallinn, Finn. Paija 11x Helsinki. Cf. Latv. appellatives of Finnic origin verb paijāt 'streicheln, liebkosen [to caress, to fondle]' < Liv. paij, Est. paiuma 'streicheln [to fondle]', and substantive paija '1. Die Spielsache, das Kinderspielzeug [game thing, children's toys]; 2. Die Liebkosung, das Streicheln [caress, cuddling]' < Est. pai 'Spielsache [plaything, toy]' ME III 34. Cf. also South Est. lexeme pai with the meaning 'willow'.</p>

Besides the above mentioned anthroponymical examples, there are Latvian surnames that are genetically connected with Finnic languages, e.g. *Jumala, Kadiķis, Kaija, Kugra, Ķīsis, Laiva, Launags, Līvs*,

Muiža, *Puika*, *Selga*. It is possible that these surnames are made from the Latvian appellatives of Finnic origin (cf. Latv. lexemes *kadiķis*, *ķīsis*, *muiža*, *puika* for example). However, in such cases it is quite difficult to determine and it is possible that such names have come from Estonia without mediation of an Latvian appellative.

2. Finnic or Latvian?

In some cases, it appears that the similarity between some Estonian (or Finnic) and Latvian surnames is just an accidental coincidence. The following surnames are probably such coincidences:

Āva (9x): Est. *Aava*, *Aav*, but cf. also Latv. appellative *āva* 'battleaxe'.

- *Ola* (9x): Est. *Ola*, Finn. *Ola*, but a more credible comparison is with Latv. *ola* 'egg'.
- *Ore* (9x): Est. *Orr ?*, *Orro ?*, Finn. *Orre* (the surname of Swedish origin: *orre* 'black grouse' Mikkonen, Paikkala 2000: 427), but cf. also Latv. appellative *ore* 'wagon, cart'.

From the point of view of the origin and primary semantics, there are many obscure surnames. Some examples, which may be Finnic borrowings as well as Baltic, are given in the following list:

- Aure f. g. (Sanita, Vija) 2x Riga; cf. also Auriņš, Aurītis; Est. Aur 1x, Aura 1x Tallinn; Finn. Aure 6x Helsinki. Cf. Est. aur, auru 'steam vapour', Finn. aura 'plough', but cf. also Latv. verb aurot 'shout, roar' (aurēt, auruot, aurāt '1. das Jagdhorn blasen [the hunting horn blowing]; 2. Heulen, rufen, zurufen [yowl, roar]' ME I 225–226)?
- Āre (Aivars, Armis, Artis, Anita, Tekla) 9x Riga; Est. Aare 12x Tallinn; Finn. Aare 1x Helsinki. Cf. Est. aare, Gen. aarde 'treasure', but cf. also Latv. āre 'open country' (āra, āre, ārs '1. das Freie, das freie Feld' ME I 239). Maybe it's one of the "poetic"

surnames, adopted during the surname change period. However, it seems that at least some of these surnames could be also of Finnic origin.

- Inkens (Edvīns) (Inkēns) 6x Riga; Est. Ingi 1x, Inkinen 1x Tallinn; Finn. Inkinen 130x Helsinki, which is connected with ancient Sw. personal name Inge (Danish, Norwegian and Icelandic Ingi) (Mikkonen, Paikkala 2000: 153). But at the same time it could be compared with Lith. surname Inkėnas.
- Kirķe f. g. (Aina) (Ķirķelis, -e) 3x, Kirķe (Kārlis, Līga) 3x Riga;
 Est. Kirk 5x Tallinn; cf. Latv. ķirķis '1. das Heimchen [cricket];
 2. ein ganz kleiner holzwurm [small quarrel]' ME II 384; though the above mentioned lexeme ķirķis is considered to be Lithuanism in Latvian.
- Māla f. g. (Lilija) 2x Riga; Est. Maal 6x, Maala 4x Tallinn; Finn. –, however, cf. also Latv. māls 'der Lehm [clay]' ME II 581.
- Nūģis (Nūģe, Raimonds, Rita) 2x Riga; Est. Nugis 29x Tallinn, Finn. –. Probably the Latv. surname can be connected with Latv. nūģis 'nudge', but cf. also Est. nugis (with short vowel) 'marten'.
- *Pinka* (Alberts, Marija) 13x Riga; Est. *Pink* 3x, *Pinko* 3x Tallinn, Finn. –. Cf. also Latv. *pinka* 'ein verwühlter Klumpen, eine Zotte [shag], *pinkains* 'zottig [shaggy-haired]' ME III 219.
- Tuls (Arno), Tula, Tule f. g. (Maija, Veneranda) Riga. Cf. Est. surnames Tuul, Tuuli, Tuule, and Est. appellative tuul 'wind', which is with a long vowel. Cf. Est. tuli, Gen. tule 'fire' however, no surname *Tuli was recorded in Estonia. In the Latvian language dictionary (ME IV 260) tuls is given as an opaque dialectal lexeme, the meaning of which is marked with "?".

3. Conclusion

The results from this study show that there are quite a few – about 200 - Latvian surnames having Finnic origins. There are more credible Finnicisms mostly borrowed from Estonian (as Latv. Ilvess, Laine, Lepiks, Luiks, Musts, Ojavere, Pedajs, Raudzeps) which have parallels in Estonian anthroponyms as well as on the level of appellatives, and less credible (as Latv. Ava, Ore) - which could by accidental coincidence. Also inflexible form of the Latvian surname gives evidence about possible borrowing (Latv. Lassi, Megi, Karro). Usually Finnic surnames have been adapted to the Latvian language by adding a Latvian ending (Katajs, Kilpis, Piks, Raudzeps). There are several Latvian surnames - indirect Finnicisms - coined from Latvian appellatives which in turn are borrowings from Finnic languages (Joma, Muiža, Selga). It seems that the most widespread Latvian surnames - possible Finnicisms (also indirect borrowings among them) - are the following: Selga, Kaupužs, Meija, Ķīsis, Karnītis, Kajaks, Kaija, Leps, Puida, Kikuts, Pallo. However, the results are based not on the whole anthroponymic material of Latvia, but only of that from the Riga city, and more specifically only from the telephone directory of Riga city. The total number of surnames having a Finnic origin in Latvia is therefore likely to be greater than indicated in this study.

Abbreviations

cf.	confer
colloq.	colloquial
dial.	dialectal
Est.	Estonian
f. g.	feminine gender
Finn.	Finnish
Gen.	genitive
Germ.	German
Latv.	Latvian

Livonian

- Mīlenbahs K. Latviešu valodas vārdnīca. Red., papild., turp. J.Endzelīns. 1.-4.sēj. Rīga, 1923.-1932. masculine gender
- m. g.
 - sub voce Swedish

- S. V. Sw

Liv.

ME

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Summary

Pauls Balodis

Although a number of studies on the connection between Finnic and Latvian languages have been carried out, anthroponymic studies on the borrowings have been few. Latvian surnames of Finnic origin are names 1) borrowed from the Estonian language; 2) names borrowed from Estonian/Finnish (as they are often common to both languages); and 3) names borrowed from the Finnish language. The lexical meaning of the etymon of the surname testifies to a possible Finnic origin; for example, Ilves (Est., Finn. ilves 'lynx'), Katajs (Finn. kataja, South Est. kat(t)ai 'juniper'), Lepiks (Est. lepik 'alder forest'), Musts (Est. must, Liv., Finn. musta 'black'). Also inflexible forms of surname (surnames endings with -o, -i in N. sg.) may be evidence of Finnic borrowing; e.g. Kangro, Pallo, Lassi, Megi. Many of the Finnic surnames have been adapted to the Latvian language by adding a Latvian ending; e.g. Kampuss, Leps, Musts, Raudzeps. There are also Latvian surnames which could be considered as indirect Finnicisms, such as surnames coined from Latvian appellatives which are borrowed from Finnic languages; e.g. Joma (Latv. joma 'inlet' < Liv. juom 'deeper water between banks'), Meija (Latv. appellative of Finnic (or German) origin meija 'a tuft of branches, birch-bough'), Paija (Latv. verb *paijāt* 'to caress, to fondle' < Liv. *paij*, Est. *paiuma* 'to fondle'). The Estonian language could be the mediator language for some Latvian surnames of mainly German or Swedish origin.

The most widespread Latvian surnames of possible Finnic origin are: *Kaupužs (?)*, *Meija*, *Karnītis*, *Kajaks*, *Leps*, *Puida*, *Kikuts* and *Pallo*.

Kopsavilkums

Pauls Balodis

Lai arī somu un latviešu valodu sakari ir samērā daudz pētīti, tomēr antroponīmisku pētījumu par savstarpējiem aizguvumiem joprojām ir maz. Šis raksts ir veltīts somugru izcelsmes latviešu uzvārdiem, ko veido: 1) uzvārdi, kas aizgūti no igaunu valodas; 2) uzvārdi, kas aizgūti no igauņu/somu valodas (jo tie bieži vien ir kopīgi abām valodām); un 3) uzvārdi, kas aizgūti no somu valodas. Bieži uzvārda etimona leksiskā nozīme liecina par iespējamu somugrisku izcelsmi, piemēram, Ilves (ig., somu ilves 'lūsis'), Katajs (somu kataja, dienvidigauņu kat(t)ai 'kadiķis'), Lepiks (ig. lepik 'alkšņu mežs'), Musts (ig. must, līb., somu musta 'melns'). Arī nelokāmas uzvārdu formas (uzvārdi ar galotnēm -o, -i vsk. nom.) var liecināt par somugru aizguvumu, piemēram, Kangro, Pallo, Lassi, Megi. Daudzi somugru uzvārdi ir pielāgoti latviešu valodai, pievienojot latviešu galotni, piemēram, Kampuss, Leps, Musts, Raudzeps. Ir arī tādi latviešu uzvārdi, ko var uzskatīt par netiešiem somugrismiem, resp., uzvārdi, kas darināti no latviešu apelatīviem, kuri savukārt ir aizgūti no somugru valodām, piemēram, Joma (latv. joma < līb. juom 'tieferes Wasser zwischen Landbänken' ME II 126), Meija (somugru (vai vācu) izcelsmes latv. apelatīvs meija 'die Maie, Ein Zweig, ein Büschel von Zweigen' ME II 591), Paija (latv. darbības vārds paijāt 'streicheln, liebkosen' < līb. paij, ig. paiuma 'streicheln' ME III 34). Igauņu valoda varētu būt bijusi starpniekvaloda dažiem latviešu uzvārdiem, kam ir vācu vai zviedru izcelsme.

Visizplatītākie somugru izcelsmes latviešu uzvārdi ir *Kaupužs (?)*, *Meija*, *Karnītis*, *Kajaks*, *Leps*, *Puida*, *Ķikuts* un *Pallo*.

Tiivistelmä

Pauls Balodis

Latvian ja itämerensuomalaisten kielten yhteyksiä on tutkittu paljon, mutta henkilönnimiin liittyvää tutkimusta on harjoitettu vähän. Itämerensuomalaisperäisistä latvialaisista sukunimistä on erotettavissa 1) lainat virosta, 2) lainat joko virosta tai suomesta sekä 3) lainat suomesta. Nimenosan leksikaalinen merkitys osoittaa usein itämerensuomalaista alkuperää, esimerkiksi nimillä Ilves (vi., sm. ilves), Katajs (sm. kataja, vs. kat(t)ai), Lepiks (vi. lepik 'lepikko'), Musts (vi. must, li., sm. musta). Myös taipumattomat o- ja i- päätteiset sukunimet saattavat olla itämerensuomalaista alkuperää, esim. Kangro, Pallo, Lassi, Megi. Toiset itämerensuomalaiset sukunimet on mukautettu lättiin lisäämällä latvialainen pääte: Kampuss, Leps, Musts, Raudzeps. Eräitä latvialaisia sukunimiä voi myös pitää epäsuorasti itämerensuomalaisperäisinä, jos ne on muodostettu latvian itämerensuomalaisperäisistä appellatiiveista. Tällaisia ovat Joma (lv. joma < li. juom), Meija (lv meija < sm. t. sa.), Paija (lv paij $\bar{a}t$ < li. paij, vi. paiuma). Viron kieli on voinut välittää eräitä sukunimiä latviaan lähinnä saksasta tai ruotsista.

Levinneimmät mahdollisesti itämerensuomalaisperäiset latvialaissukunimet ovat Kaupužs (?), Meija, Karnītis, Kajaks, Leps, Puida, Ķikuts ja Pallo. RIHO GRÜNTHAL Helsinki

Livonian at the crossroads of language contacts

Introduction

Livonian, the southernmost Finnic language, was first documented at a stage at which it had been a minority language for several generations and many centuries. By that time language shift was intensive and the size of the speech community was small in comparison with the surrounding language communities and also their political, economic, and cultural power. Conceivably, linguistic data originating from the beginning of systematic documentation in the 19th and 20th centuries reflect a sociolinguistic stage that is characterised by ample lexical borrowing and transparent foreign influence. The diverging of the two documented main variants, Courland and Salaca Livonian, took place no later than the 13th century (Winkler 2011: 231) during the rise of German colonisation. At this time, both variants are extinct as languages of speech communities.

Extensive bilingualism among Livonians and the shift to Latvian imported a considerable number of loanwords into Livonian vocabulary as well as morphosyntactic patterns as functional borrowings of Latvian grammar at the final stage before the extinction of the speech community. Besides Latvian, German influence is well-known due to transparent lexical parallels between Livonian and different German variants such as Low German and High German. Latvian and its local variants were the majority language that represented a higher social level for Livonians, while German was the language of the barons, landowners, and upper class that held economic privilege for centuries after the rise of the German colony in present-day Latvia and Estonia in the 13th century. However, the geographical and sociohistorical context of the Livonian language suggests that contacts were not limited only to variants of Latvian and German.

Geographically, Livonian used to be spoken in areas that were located along important water routes and trading connections that over time were involved in conflicts between various ethnic groups. The northeastern coast of Courland (Latvian Kurzeme) and the estuary of the Daugava River outlined the eastern track for Scandinavians arriving from the western parts of the Baltic Sea area. Furthermore, Swedish used to be spoken on Runö, present-day Estonian Ruhnu, a small island located in the Gulf of Rīga. Historically, Swedish was also spoken in western Saaremaa (Swedish Ösel) and several other islands on the northwestern and northern coasts of Estonia. The northernmost Livonian villages had only a distance of 40 kilometres to Runö and also to Saaremaa, which had a mainly Estonian-speaking population . This is reflected in the development of Livonian as well, although Estonian influence is more difficult to identify in comparison with that of Latvian and German. Kettunen's (1938) Livonian dictionary, for instance, includes tens of words that are labelled as borrowings or possible borrowings from Estonian in Livonian; however, many of them are ambiguous.

This article aims at an overview and description of different contact-induced influences in Livonian with a special emphasis on lexical data. We maintain that although areas in which Livonian was last spoken were subordinated to larger centres that had wider economic and political networks, linguistically, Livonian was a contact point for many languages. The focus is on the western variant of Livonian spoken in Courland until the early 21st century. The eastern variant formerly spoken in Livonia proper on the eastern coast of the Gulf of Rīga, often labelled as Salaca Livonian, is not discussed in detail.

Historical overview of the language contact area

The identification of Latvian and Germanic loanwords in Livonian is, in principle, based on the transparent similarity between words, as the differing genetic source of these languages excludes a shared background. Livonian is the southernmost Finnic language belonging to the western branch of the Finno-Ugric languages, while both Latvian and German are Indo-European languages that historically have a clearly different basic vocabulary and grammar in comparison with Livonian. The number of transparent Latvian loanwords in Livonian is considered to be very high in the evidence of printed vocabularies. Winkler (2011: 232), for instance, claims that 37% of the Livonian vocabulary consists of borrowings of which 58,5% are Latvian and 38% German (either Low or High German). Suhonen (1973) lists 2534 Latvian loanwords in Livonian. He evaluates the proportion of different word classes and claims that, as expected, the vast majority (63%) of Latvian loanwords are nouns, 26% verbs, 9% adjectives, and 2% adverbs. Naturally, the numbers merely reflect the chosen sample and the frequency of parts of speech. The real impact of bilingualism extends far beyond etymological word lists and lexical taxonomy. After all, extensive borrowing very often signals the decrease of the functional space of the minority language and the progress of language shift. In fragmented speech communities there is typically a lot of idiosyncratic variation and the influx of borrowed words and other contactinduced changes is constant.

The large amount of loanwords in Livonian shows the final stage of language shift with Livonian no longer being transferred to children. In documented Livonian vocabulary a high number of underived word stems actually is of foreign origin. Such an intensive foreign interference is considered a possible implication of grammatical influence. As a matter of fact, it has been pointed out that Latvian has influenced Livonian grammar as well. Verb prefixes, several adverbs, the extensive use and semantics of the dative and instrumental case, case government in certain adpositional and verbal phrases have arisen through contact-induced change (Grünthal 2003: 177-202, Halling 1998, 1999, Koptevskaja-Tamm & Wälchli 2001: 677-679, Wälchli 2000: 216–218, 2001: 430–433). As Ariste (1973: 177) writes, there is hardly any phraseological or syntactic construction consisting of several constituents that would not have been affected by Latvian. Thus, the grammatical influence of Latvian in Livonian is probably even more extensive than has been demonstrated so far.

It is evident that Latvian influence is not exclusively limited to Latvian vocabulary and grammar, but that it has transmitted into

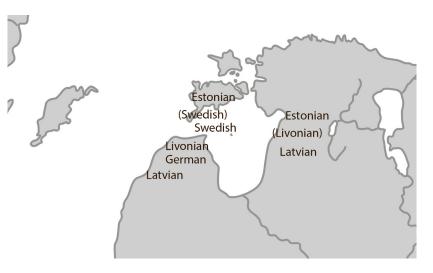
Livonian numerous words that historically originate from some other language, most notably Low or High German but also Latin and Russian. In the latter case it must be noted that transparent Russian loans are typically newer and reflect the mobility of individual Livonians in Russian-speaking environments instead of influence on the entire Livonian speech community. Winkler (2002) discusses 89 Livonian words that have a Slavic origin. There are at least 24 words that have to be viewed in a wider context, whereas 65 are direct or indirect borrowings from Russian, of which at least 26 were transmitted by Latvian.

Recently, Lembit Vaba (2012,2014) has shed new light on the Curonian substrate in Livonian. The hypothesis regarding the existence of the Curonian language (cf. Kiparsky 1939), alternatively referred to as Old Curonian, is repeatedly mentioned in Baltic studies; however, it has been more difficult to argue linguistically regarding the purported characteristics of Curonian. Vaba shows in a detailed analysis, the Livonian features diverging from documented Latvian dialects and probably originating from the extinct Baltic Old Curonian language. However, this influence can only be shown in terms of a careful analysis of substrate features and, consequently, differs considerably from other contact features discussed in this paper.

Given that the diffusion of contact-induced phenomena takes place at various levels of language and the adoption of new words and patterns is not uniform, it would be reasonable to discuss the scale of foreign influence on Livonian. However, the linguistic heritage of a Livonian-speaking community mainly consists of vocabularies, word lists, and text samples that do not reveal the degree to which an individual loanword, for instance, was used in the speech community. Was there any synonym that was used parallel with it, were there many people who would use the same expression or just a few, and was a given loanword inflected as any other word of the same category? In linguistics, borrowing and language contacts have been accounted for in several ways (Hoffer 2008). In the following we use borrowing to denote a lexical trace of language contact regardless of whether it was used only once in a multilingual context or could also be labelled as a *loanword*, a lexeme that is fully adopted in the lexicon of the given language.

Although this article focuses on the history of Livonian vocabulary by means of etymological analysis, we illustrate the borrowing of words with sentences, longer units that show the functional context of individual words. In the examples to follow, the Livonian word is first presented in the standardised form of the Courland dialects (Cour) and, if the same stem is attested, in Salaca Livonian (Sal) as well. Variants representing the Courland dialects are drawn from Viitso & Ernštreits (2012), while those of Salaca Livonian from Winkler & Pajusalu (2009).

As indicated in Map 1, by the time it was systematically documented, multiple languages surrounded Livonian in the territories in Courland and northern Livonia where it once had been spoken. This raises the question regarding the role of languages, such as German and Latvian, which used to be spoken in Latvia as well as the languages of the adjacent northern territories, namely Estonian and Swedish. Both of these latter two languages were once spoken just a short distance of only some tens of kilometres across the sea.



Map 1. The geographical area of Livonian and the geographically adjacent languages at the beginning of the 20th century.

Latvian influence on Livonian

As noted above, in the final stage in which Livonian was documented, all of its variants were heavily influenced by Latvian. This influence was not limited to lexicon; the phonology and vowel and consonant paradigms of Livonian in Courland, for instance, are strikingly similar to those of Latvian and diverge from other Finnic languages (Suhonen 1973, Winkler 2000, 2001, 2011). However, it must be noted that Livonian and Latvian are not completely identical either. Latvian vocabulary is typically adapted to Livonian morphology as lexical units inflected in the same manner as other Livonian words.

Phonologically, the adoption of word-initial consonant clusters is an illustrative example of the adoption of a contact-induced change in the sound inventory. In early Germanic loanwords shared with other Finnic languages, consonant clusters from Germanic are regularly replaced with a single consonant in Finnic (LÄGLOS). In (example 1) Livonian *skruodil* 'tailor' shows a phonological dissimilation of the word-final $l \sim l$ that is attested in Courland Livonian (Cour) as well as Salaca Livonian (Sal), which has *skruodel* 'tailor'. The other phonological variant Livonian (Cour) *skrūodõr* id. corresponds more precisely to Standard Latvian *skroderis* id., a borrowing from Low German *schrôder* (Kettunen 1938: 373, Winkler & Pajusalu 2009: 176). A similar phonological dissimilation has taken place in Finnish *räätäli* 'tailor' that is borrowed from Swedish *skräddare* id. (SSA 3: 132).

Cour skrūodõr, Sal skruodel 'tailor'

- (1a) *nim tund skruodil'* 'So a tailor has come.' (MSFOu 106: 61)
- (1b) *ikš miez um võnd un kēņig pūoga un ikš skruodiļ* 'There was a man and the king's son and a tailor.' (MSFOu 106: 89)

Likewise, the substitution of Germanic *-ch-* [k] with Livonian *-k-* is assumed in the verb *vaktõ* '(keep) guard' (example 2). In printed dictionaries this is considered a Low German loanword < MLG *wachten* 'guard; lurk; look, watch' assuming that it was transmitted

into Livonian through Latvian *vaktēt* (Kettunen 1938: 467, Winkler & Pajusalu 2009: 215). Thus, the substitution and the palatalisation of *-t*-actually reflect Latvian and the Dundaga dialect of Latvian more than Livonian (Kettunen 1938: 467). The consonant cluster *-kt-* is, however, attested in Swedish *vakta* (a Low German loanword in Swedish (Kluge 2002)) from which Finnish *vahtia* descends (SSA 3: 388). The substitution of Low German *-ch-* [k] with Livonian *-k-* is seen in (Cour) $sk\bar{a}d\tilde{o}$ 'harm' (example 3), a casual borrowing not mentioned in published vocabularies. A High German origin is not possible, because High German *Schade* should occur as *š-* in Livonian (cf. also examples 17–18 below).

Cour vakțõ, Sal vakt 'to (keep) guard'

- (2a) *ni ne munt kōrapāinõd adtõ vakţõnd tānda un äb uotõ nuovakţõnd* 'So the other shepherds have looked after him.' (MSFOu 106: 64)
- (2b) *ta vakţīz mis se nai tieb*'(S)he was watching what the woman does.' (MSFOu 106: 115)

Cour skādõ 'to harm'

(3) mis se kaš skādo tei?
'What harm did the cat do?' (MSFOu 250: 90)

In (example 4) the verb *brou'tšõ* 'to ride', a transparent loan from Latvian *braukt* 'to go, ride': *braucu* ride.1SG 'I ride': *brauc* ride.3SG '(s) he rides' likewise maintains the word-initial consonant cluster and is inflected in all Livonian verb categories as shown by the encoding of the forms *broutšist* (example 4a) and *broutšõg* (example 4b). The stem alternation characteristic of Latvian is not manifested in Livonian, in which the stem exhibits morphological simplification and decreases redundant allomorphism. In (example 5) the Latvian noun $zv\bar{e}rs$ 'beast' loses the masculine nominal marker -s in Livonian, as it has no grammatical gender, while the word-initial cluster zv- is preserved.

Cour [no]sve'itõ 'to bless', Sal sveit id.

- un tēg pivād eggiļ **nosveitīst** kupsõ min punīz armi zoldatodoks (6) 'And yesterday you celebrated the [holy day] together with my red army soldiers.' (MSFOu 250: 18)
- (7) nei tam teiž satiekõn se piški miez 'So (s)he has met the small man again.' (MSFOu 106: 86)

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Cour brou'tšõ 'to ride'

- (4a) ne dūššig broutšist, neku läpš äb kīlma järān (Kūolka) 'They drove fast so that the child would not freeze.' (MSFOu 250: 37)
- (4b) *laz se broutšõg tegīž mõtsõ* (Kūolka) 'Let him/her drive back to the forest.' (MSFOu 106: 68)

Cour zvē'r 'beast', Sal zvāra ~ zvē'r 'animal'

(5) se izā näntõn um andõn kummitõn kuolm **zvērõ** īnõ, sud, okš un pin. 'The father has given them both three beasts, a wolf, a bear, and a dog.' (MSFOu 106: 135-136)

Occasionally, the Latvian words may include grammatical elements such as verb prefixes, as in nosveitīst in (example 6). The Latvian verb nosvētīt is bimorphemic consisting of the verb prefix no- 'from; by' and the stem svētīt 'to bless'. However, from a lexical viewpoint the prefix loses its aspectual role in this particular example in which it is simply fused onto the word stem in the borrowing process. Alternatively, one must assume that in the speech of a bilingual Livonian speaker the Latvian verb prefix system maintains those characteristics that it has in Latvian. Kettunen (1938: 390-391), for instance, includes the verb stem svēttõ 'to bless' in his dictionary without the prefix. A parallel case is seen in (example 7) in which the bimorphemic Latvian verb satikt 'to meet' may, in principle, be considered a monomorphemic loanword in Livonian from an etymological point of view. The word list of Latvian loans in Livonian by Suhonen (1973) includes several similar cases. Neither of the words investigated in examples (6–7) is included in (Viitso & Ernštreits 2012).

In individual cases the historical context of a given word such as Cour $p\bar{o}t\tilde{o}r$ 'prayer' (examples 8a–b) suggests that the borrowing may date back to the Middle Ages. The word originates from Latin pater (noster) 'father' and demonstrates a semantic extension of the original word that is attested in Latvian pātari, pāteri 'prayers' (Mülenbach & Endzelin 1923-32 3: 190-191) including the dialects of Dundaga pātter id. (Kettunen 1938: 309). In principle, the Livonian word could be borrowed through Latvian assuming that the word was adopted during church services that were held in Latvian after the Reformation and spread of the Lutheran church in the 16th century. However, in this case one would assume that a standard Latvian word for 'prayer' such as *lūgšana* would be found in Livonian. Thus, Livonian potor 'prayer' probably reflects a rare example of direct borrowing from Latin and originates from the time at which Catholic services were held in Latin before the start of the Reformation in the 16th century. Mülenbach & Endzelin (1923-32 3: 190-191) consider Latvian pātari, pāteri 'prayers' a parallel borrowing with the Livonian word that, however, phonologically could descend both from Latvian *pāteri* and Latin *pater*.

Cour poțõr 'prayer'

(8a) siz lapst kädst īrgist kizzõ **pōțiŗi** sōrmō kīelkõks

'Then they started to ask the children prayers in Estonian.' (MSFOu 250: 24)

(8b) kis äb li jõvīst ieoppõn **pōțiŗi** siz ne sōbõt pieksõ '[They] who have not learned the prayers well, will then be punished/beaten.' (MSFOu 250: 40)

As the differing etymological origins of *potor* 'prayer' and *svetto* 'to bless' demonstrate, religious vocabulary in Livonian originates from several etymological layers. Words such as päp 'priest, pastor, minister' and rist 'cross' belonging to the core religious lexicon of Christianity are attested in all other Finnic languages as well and originate from Slavic (Ariste 2010 (1958): 133, Kalima 1952: 133, 149-150, 197, SSA 2: 311–312, SSA 3: 83).

In this article, the Latvian influence on Livonian vocabulary is treated in a very limited way. More generally speaking, the contact between Latvian and Livonian has been more intense than all other contacts experienced by Livonian. This partly reflects the state of the speech community in the 19th and 20th centuries. Latvian was the dominating language and in individual families language shift was intensive. The basic effects of contact-induced change including the addition of features in the recipient language, replacement of old features by new ones, and loss of features without replacement (Thomason 1997: 184) are all characteristic of this particular language contact. Some of the changes and examples are idiosyncratic but, as a whole, the number of changes that have penetrated the language system is high, which is very illustrative in terms of the social constraints of language change (cf. Milroy & Milroy 1997). From the viewpoint of borrowing Latvian vocabulary, this particular language contact actually contributed to a reconceptualisation of many semantic areas. At its final stage, the influence of Latvian corresponds to what Aikhenvald (2006: 43) calls a displacive contact, the imposing of one's language on another group that results in the gradual loss of inherent features and language shift. Following the parameters of Thomason and Kaufmann (1988: 75, cf. Clyne 2003: 95, Winford 2003: 170-187), Latvian influence on Livonian yields strong cultural borrowing and moderate structural borrowing.

Historically, it is not possible to reconstruct an unambiguous chronology of Latvian and Livonian contacts. Ariste (1973: 176), for instance, assumes that the German colonisation of the Livonian areas in the 13th century was followed by contacts between Livonians and Latgalians. According to him, Livonian had adopted its documented form already in the 16th century and this form had actually arisen as a result of the contact situation and Latvian influence. This, however, is not self-evident because the diffusion of bilingualism and contact-induced changes did not occur in parallel in all areas.

German influence on Livonian

Compared to Latvian, the German influence on Livonian is clearly limited to lexicon. In linguistic literature, no grammatical changes thus far have been considered to be the result of German influence. The sociohistoric context explains this difference, because despite the importance of German as the language of trade and education, political and social power, and that of the colonists of the Livonian lands, the social gap between the Livonian peasants and German landlords actually divided the two speech communities from one another. Although there is a high number of German loanwords in Livonian, there is no evidence for extensive German-Livonian bilingualism or grammatical borrowing from German to Livonian. In fact, numerous German loanwords were probably transferred through Latvian to Livonian. The language contact situation and geographical overlapping lasted for several centuries, but there is no unambiguous evidence that the speech communities would have crossed the boundary between them.

This corresponds to what is known regarding the role of the German migrants and ruling class in Estonia and Latvia during the period after they settled in the Baltic countries and colonised the local lands and people. Beginning in the 14th century during the late medieval period and throughout the following centuries, Low German was the main language of communication among merchants and trade networks. On one hand, it is alleged, for instance, that ship traffic between the towns on the northern coast of the Gulf of Finland and Tallinn used Low German almost exclusively during the heyday of the Hanseatic League. Presumably, there even existed several local written varieties of Low German. On the other hand the concept of undeutsch 'non-German' originates from the Middle Ages and the transaction lists of the products originating from the province of Livonia, which include many products characterised as 'non-German'. During the 16th century High German replaced Low German as the language of city councils and secretaries. In individual families Low German was preserved as the language of communication until the beginning of the 19th century. (Ariste 2010 (1937): 201, Bentlin 2008: 8, 14, 52, Braunmüller 2007: 32, Hinderling 1981: 94, Johansen & Mühlen 1973, Johansen 2006 (1939): 163, Raag 1987, Talve 2004: 61, Zetterberg 2007: 139.)

The most extensive description of German influence in Estonian is written by Hinderling (1981). While it is often possible to distinguish between Low German and High German borrowings and the German inhabitants of the Livonian province originated mainly from different parts of northern Germany, the geographical core of the Low German speech area, it has been claimed that the contact actually took place between Baltic German and Estonian (Hinderling 1981: 94–97, Raag 1987: 320–321).

After the devastating Livonian War and the continuing conflicts of the 16th and early 17th centuries, the population of the Baltic countries gradually began to increase. Trade and economic connections were ruled by the social upper class that owned the lands and labour and had access to all necessary networks. Local people, such as the Livonians, formed the labour force but their language never gained the same position as that held by German, which functioned as the language of education, economy, rising cities, and politics. Furthermore, in Old Livonia, the territory in present-day western Latvia and southern Estonia, in which the social and ethnic structure was similar with Courland and that was ruled by the Germans, cultural life was strongly divided along national and social boundaries. In Estonian-speaking areas, for instance, the Baltic Germans were Kulturträger in the sense that Raun (1987: 23) characterises the situation; however, the culture of the Germans remained foreign to the Estonian masses. The Catholic Church also did not succeed in bridging the gap between the Germanand Estonian-speaking populations, although during the Late Middle Ages there were individual religious schools such as those of the Dominican monasteries that emphasised the importance of knowing the local language (Talve 2004: 59).

In the Livonian speech area during the Reformation and rise of the Lutheran religion in the 16th century, the Livonian language was never adopted as the foremost tool for delivering the gospel to the local people, despite the significant increase in emphasis on local languages during the following centuries. In this respect, Livonian was placed in a considerably weaker position than many other languages around the Baltic Sea such as Swedish, Latvian, Estonian, and Finnish; these other languages became languages of the Lutheran Church and surrounding society during the following centuries. The position of the peasants continued to be difficult in many respects and they lacked any of the political and economic rights that would have given them more freedom from their forced economic alliance with the German landlords. This was clearly seen in those parts of Swedish Livonia that were under the rule of the Swedish king in the 17th century. In 1671 the rural security regulations in Livonia formally confirmed the binding of peasants to their place of birth. Flight continued to be the major means of resistance and peasants from the province of Estonia, for instance, repeatedly sought refuge in Livonia and Russia. The differing economic, social, and political rights of these communities caused complaints about exorbitant taxes, expropriation of peasant lands by the lords, unfair treatment, and corporal punishment (Raun 1987: 30–31).

From a linguistic viewpoint, the geographical adjacency and assumed contact situation between Livonian and German is characterised by strong contrasts and the dissimilarity of the two languages at issue. In principle, the typological difference between Livonian and German does not diverge from that of Estonian and German because Livonian and Estonian are both closely related to each other and share many of the same typological differences in comparison with German. However, German influence is clearly involved in the rise of some syntactic features in Estonian, for instance, the wide use of aspectual verb particles. This category, however, was actually introduced by German priests who started to write Estonian in a literary form for religious purposes in the 16th and 17th centuries (Hasselblatt 2003).

Given the parallel evidence of German influence on Estonian, there are two ways of accounting for the German loanwords in Livonian. Firstly, they may simply be labelled as German loans as Winkler (2011) does in his thematically organised list of German loans. Secondly, many of them have identical parallels in Latvian that emphasise the importance of Latvian as the transmitting language and the adoption of Latvian by bilingual Livonians. As noted above, it is not always unambiguous to assume that a given word is a direct borrowing from German to Livonian. Livonian *kem* (Salaca *kämm*) 'comb', for instance, has a similar front vocalic form as Latvian *kemme* id. (Dundaga *kemm*) < Low German *kamm* (Kettunen 1938: 114) actually reflecting an umlaut stem of the Low German word. The verb *arštõ* 'to nurse (to health), cure': *ta ārštiz* (example 9) corresponds to both Latvian *ārstēt* id. and Low German *arsten* id., the original source of the word.

Cour arštõ 'to nurse (to health)'

(9) tulțõ ka koūgõnd täm jūr un ta ārštiz
 'They came to see her/him even from a distance and (s)he nursed them [to health].' (MSFOu 250: 22)

There is no unambiguous way to demonstrate whether the given word was borrowed into Livonian from Latvian or directly from Low German. In principle, one could even assume that the given word was transferred by Estonian, which also had borrowed the same word arstima 'to nurse (to health)' from Low German (Kettunen 1938: 14-15, EES 53). The length of the word-initial a-, for instance, does not provide sufficient evidence, because the lengthening of first-syllable short vowels in front of a syllable-final voiced consonant is a regular sound change (Kettunen 1960: 127–128) as in jālga 'foot' < jalka, attested both in inherited and borrowed lexicon and subsumed into more general rules of Livonian prosody, vowel length, and syllable structure (Pajusalu & al. 2007, Lehiste & al. 2008, Viitso 2007). However, there is one detail that supports the hypothesis that, actually, the Livonian verb arštô 'to nurse (to health), cure' was borrowed through Estonian. The change $s > \check{s}$ occurred in Livonian, if s preceded i or j (Kettunen 1960: 170) and was caused by regressive assimilation. Estonian arstima would explain the emergence of š in Livonian but not the Latvian or German variants. Alternatively, one must assume that the quality of a post tremulant -s- in Low German corresponded to Livonian -š-.

Ariste (1973) points out that in some words such as (Cour) $p\bar{a}nda$ 'crossbar' < Middle Low German *bant* id., (Sal) *penk* 'bench' < MLG *benk*, (Sal) *püss* 'gun' < MLG *büsse(n)*, etc., the voiced word-initial plosive *b*- is substituted with the corresponding unvoiced *p*-, which is typical of Finnic languages and seen in older loanword layers. Instead of *pānda*, Kettunen (1939: 279) actually connects Livonian *pāntta* with MLG *bant*. Secondly, Ariste (1973) lists Livonian words in which a word-initial consonant cluster such as *sch*- and *st*- is replaced with a single unvoiced plosive: (Cour) $k\bar{n}n$ 'shed' < *schüne*, $k\bar{n}r$ 'a shed for smoking fish', (Cour) kūoršõn 'chimney' < MLG schorsten, (Cour) kipīl, küpīl 'dustpan' < MLG schüffel, tal 'stable' < MLG stal and (Cour) $t\bar{u}op$ 'mug, tankard' < $st\bar{o}p$ id. etc. The word $k\bar{n}p$ has the parallel forms *skīn* and *škūn* 'shed' and Estonian *küün* id. (Kettunen 1939: 134, 372, Mägiste 1982-83: 1182) and tūop has a parallel variant stūop (Kettunen 1939: 384). Thirdly, Ariste (1973) assumes that also certain other Low German borrowings in Livonian represent the older chronological layer, for instance (Cour) lot, lat 'church service' < avlāt 'let off', (Cour) oppõr 'sacrifice' < opper id., poțā 'pot' < pot id. Of these criteria, the second one is most feasible, as word-initial consonant clusters in Livonian originate from foreign influence and a stage in which especially Latvian considerably changed the phonological structure of Livonian. The replacing of voiced plosives with unvoiced ones is, in principle, also correct. However, it is not possible to reconstruct a more concrete chronology than terminus ante quem because the spread of bilingualism and collective adoption from Latvian finally determines most of the relevant changes.

The ambiguity of the paths of borrowing is reflected in the following case as well. The determinant of the compound word *kežbir* 'cherry tree' seemingly has undergone a similar loss of a tremulant as Latvian *kezberis* id. < Low German *kersebere* (Kettunen 1938: 116). However, many local Low German variants display a form without a tremulant, such as *kassbeer* and *kessebeern* which is a more likely explanation for the lack of the tremulant in Livonian. Livonian *kestār* 'sacrist' formally displays a similar delabialised first-syllable vowel as Latvian *kesteris* id., originating from Low German *köster* (> Estonian *köstēr* id.). However, the variants of the Livonian word include *köstār* (Kettunen 1938: 116). As a matter of fact, this variant is the strongest evidence for the hypothesis that the word must be a direct borrowing from Low German, because Latvian does not have the labial front vowel *ö*.

A definite and explicit way of determining the origin of a word is its historical context. The word $b\bar{a}n$ 'railway' is not mentioned in the most important dictionaries (Kettunen 1938, Viitso & Ernštreits 2012) as a transparent borrowing from High German *Bahn* 'railway' etc. (example 10). Historically, it is indisputably a very late innovation in Livonian because the railway was built in Courland only in the 1910s during World War I and used less than fifty years. (10) *ni voļ vodlimist, kuņţš tuļ bān āiga*'So one had to wait until the railway came.' (MSFOu 250: 48)

In general, there are not very many distinctive phonological features that would allow one to distinguish between borrowings directly from German to Livonian and words that were borrowed through Latvian. The consequence of the intensive Latvian influence on Livonian is that both the vowel and consonant inventory, the principal tool of identifying loanwords, have become very similar in these two languages. However, given that the contact between Livonian and German lasted for more than seven centuries, a more detailed analysis should account for phonological substitution rules in borrowed vocabulary in order to reconstruct a relative chronology for the language contact.

In (example 11) the noun zoldat 'soldier', not included in Kettunen (1938) though mentioned in Viitso (2012: 377), reflects only partly the pronunciation of the High German Soldat id. with a voiced sibilant zthat reflects a recent contact situation. However, even Latvian zaldāts id. that reflects the German second-syllable stress Soldát could correspond to Livonian $z\bar{o}ldat$, because a first-syllable \bar{a} - is generally manifested as \bar{o} in most Courland Livonian dialects. In this case, nevertheless, it is more difficult to explain why the Latvian short vowel a- would correspond to \bar{o} in Livonian, if Latvian had transmitted the given word. Thus, the first syllable $-\bar{o}$ - in Livonian probably is a typical result of Livonian first-syllable vowel lengthening of an originally labial vowel and the resistance of the Livonian stress system in a contact situation. Furthermore, it must be noted that the syllable structure is decisive in Livonian and the secondary labialisation of the first-syllable *a does not occur in two-syllable words such as randa 'shore, coast' (Estonian rand, Finnish ranta) that have a word-internal consonant cluster.

Cour zöldat 'soldier', Sal saldāt id.

(11) siz ta minnõn kõzāks öriz, voi minā äb tīeda sedā ku zöldatõdõn, kīen um flint kädsõ, nēd äb uo brī piejuotõ

'Then he shouted angrily at me, whether I do not know that it is not allowed to give a drink to those soldiers that have a gun in their hand.' (MSFOu 250: 17) Likewise, Livonian *flint* 'gun' has preserved the foreign word-initial consonant cluster *fl*- and corresponds to High German *Flinte*. The older variant *plīntta* id. included in Kettunen (1938: 302) reflects a substitution of *fl*- with *pl*- that is attested in Dundaga Latvian *plint* as well. Here, it must be noted that *f* does not belong to the Latvian consonant inventory. In a similar way, the third word of German origin in this example, $br\bar{i}$ 'free' (cf. Kettunen 1938: 29), has substituted the foreign cluster, cf. Low German *vri* id. (~ High German *frei* id.), Swedish *fri*, but only partly as the cluster itself has been maintained. The Latvian variant $br\bar{v}s$ id. may have influenced the Livonian pronunciation. In transliterated text samples the Latvian adjective stem $br\bar{v}v$ is attested as such in Livonian (example 12).

Cour *brī*(*v*) 'free'

 (12) siz set um vond brīv kērattõ saksādõn, saksā rönttidi un saksā mīel pierrõ (Vaid)

'Then it was allowed only for the Germans to write German books and according to a German worldview.' (MSFOu 250: 81)

The controversy between the Old Livonian phonological system, the medieval variant of Livonian preceding the documented stage, and interference of language contacts is illustrated by the inconsistent adoption of word-initial consonant clusters that do not occur in inherited Finnic and Finno-Ugric vocabulary. In words borrowed from Latvian and German, word-initial consonant clusters are very common. Compared to the substitution of fr- in (example 12) above, the adoption of pr- diverges in examples drawn from the Eastern Livonian dialects. In (example 13) Livonian *priš* < German *frisch* 'fresh' shows the adoption of the consonant cluster but rejection of the foreign sound f- and replacement of it with p-. In (example 14) the variation between frand *pr*- shows that the lexical form is not yet established. In (example 15) the informant formally rejects the consonant cluster pr- and replaces it with fr-, which diverges even more from the expected prints 'prince' (< German Prinz 'prince'). It must also be noted that none of the words presented in examples (13-15) are attested in documented Salaca Livonian (Winkler & Pajusalu 2009) and only prints is mentioned in Viitso & Ernštreits (2012).

Cour priš 'fresh'

(13) *se nai lekš īdõz miŗīņļ kōmarõz un sāl voļ teiž ikš priš miŗīņõz* 'The woman went to a mortuary and there was a fresh body again.' (MSFO 106: 115)

Cour printsess 'princess'

(14a) siz kēzar **frintsess** pistāb eņţš suormõks sinnõn suormõ un sidāb eņţš zīdõz näzdag immõr sin jālga

'Then the Emperor's princess puts her ring on your finger and binds her silk scarf around your leg.' (MSFOu 106: 147)

(14b) kēņig printsess nid tāb pretsimist

'The king's princess now wants to get married.' (MSFOu 250: 99)

Cour prints 'prince'

- (15a) *täm frints um iend pa rištīngõks* 'Her prince has changed to man.' (MSFOu 106: 159)
- (15b) tämā um iend pa knaššõks frintsõks

'He has become a beautiful prince.' (MSFOu 106: 158)

Generally speaking, however, the phonological quality of German loanwords in Livonian corresponds to that of the source language. The difference between voiced and voiceless as well as alveolar and palato-alveolar fricatives is preserved as in the original form. Word-initial consonant clusters that begin with a fricative illustrate the phonotactic change in Livonian that has taken place by adopting masses of loanwords. Livonian *snūor* 'string' (example 16), for instance, cannot be borrowed from High German *Schnur* id. because the diphthong *uo* cannot originate from *-u-* and German *sch-* should be *š-* in Livonian. The word originates from Middle Low German or Old High German *snuor*, from which it may have been transmitted through Latvian *snuore* (Kettunen 1938: 376, Mülenbach & Endzelin 1923–1932 3: 979).

(16) ikš kõrd um võnd ikš lāška puõis, kaitsõn niemidi un vändõn snūoridi jõranaigās (Kūolka)

'Once there was a lazy boy who looked after cows and twisted strings on the shore of a lake.' (MSFOu 106: 149)

High German palato-alveolar fricatives are preserved in Livonian as in (example 17) Livonian *širm* 'shade' < High German *Schirm* 'shade' etc. (> Estonian *sirm* id. (Metsmägi & al. 475)) and (example 18) the casual borrowing *švogõr* 'brother-in-law' < High German *Schwager* id. Both words are not found in Mülenbach & Endzelin (1923–32). However, still, it does not mean that they did not exist in Latvian.

Cour širm 'shade'

- (17) *ni ta pīkstub sie kibār širm alā*'So (s)he presses down the shade of the hat.' (MSFOu 250: 101)
- (18) mīnda iz lask krīevõ švōgõr jūssõ (Kūolka)
 'The Russian [soldier] did not let me to [go to my] brother-in-law.' (MSFOu 250: 77)

As a rule, borrowings from High German tend to reflect a more recent language contact situation in comparison with Livonian words originating from Low German or Old High German. The sphere of High German as the official standard language increased only in modern times in the Baltic countries following changes in the main Germanspeaking areas elsewhere in Europe. However, there is no explicit way to divide the High German and Low German loanwords in Livonian into chronologically distinct groups on the basis of phonological evidence. There are clearly Low German borrowings such as Livonian strip 'stripe' (example 19) < Low German stripe id. that have preserved even triple consonant clusters word-initially (cf. also Livonian $br\bar{i}$ (example 12) above) and, hence, cannot be considered old enough to have originated from such an Old Livonian variant in which wordinitial consonant clusters were still replaced with single consonants. As in numerous other cases, Livonian strīp 'stripe' is possibly transmitted through Latvian cf. Dundaga strīp id., Latvian strīpa, strīpe (Kettunen 1938: 383, Mülenbach & Endzelin 1923–32 3: 1092).

RIHO GRÜNTHAL

LIVONIAN AT THE CROSSROADS OF LANGUAGE CONTACTS

Cour strīp 'stripe', Sal strīpli 'striped' (~ Cour strīplimi id.)

RIHO GRÜNTHAL

(19) ku sa lād suodā nurm pālõ, siz sa eņţšõn viedā seļļiz strīp kuolm kõrd immõr

'When you go to the battlefield, then trace such a stripe around yourself three times.' (MSFOu 106: 144)

It must be noted that as evidenced by the investigated cases, borrowings from Low German are very frequently represented in both Livonian main variants, Courland and Salaca Livonian. High German borrowings, in turn, tend to be represented in Courland Livonian or in individual cases should rather be labelled as casual borrowings. This tendency would deserve a more detailed analysis, however, it is beyond the scope of this article. It must also be noted that Baltic German gained a greater foothold in the Baltic education system in the 19th century when Salaca Livonian was already on the verge of extinction.

Historically, those borrowings diverging from expected phonological structure provide interesting evidence regarding the diversity within the seemingly homogenous group of German borrowings. The word *potī*l 'bottle' in Courland Livonian (example 20) diverges from the Salaca Livonian *putel*, which is a transparent borrowing from Latvian budele ~ butele ~ pudele id. It originates from Low German buddel and is also manifested in Estonian pudel and Finnish puteli that was borrowed through Swedish buteli, all meaning 'bottle' (EES 387, SSA 2: 441). Livonian potīl descends from a parallel variant that instead of the first-syllable -u- has -o-, historically reflecting the Old French form boteille, which is the source of English bottle. In fact, the parallel variant with word-initial po- is represented in other Finnish and Estonian dialects (SSA 2: 441, VMS 2: 251-250) though none of the literary standards displays it. Regardless of the ascribed variation and lexical parallels in other languages, Livonian *potī*, 'bottle' exhibits an undiphthongised first-syllable -o- instead of -uo-. The latter is attested in old inherited Finnic vocabulary and is characteristic of Latvian borrowings (Kettunen 1938: 305-306, 316-318, Suhonen 1973: 183-184). The Latvian influence is seen in the adoption of such Low German words in Livonian as $b\bar{u}odnik\bar{a}$ 'merchant' \leftarrow $b\bar{u}od$ 'shop' < Latvian buode 'store; shop' < Middle Low German

bode id. (Mülenbach & Endzelin 1929–1932 1: 360) and Livonian *skūol* 'school' < Latvian *skuola* < Middle Low German *schōle* < Latin *schola* 'lecture; academy, school' etc. (Kettunen 1938: 31, 373, SSA 1: 414). Thus, first-syllable *-o-* occurs only in the newest loanwords and casual borrowings. Alternatively, it is the syllable structure and consonant-final second syllable that prevents the vowel lengthening and diphthong in the first syllable.

Cour potīļ 'bottle', Sal putel id.

(20) ni võnd brāndiļ **potīļ**

'So [there] was a bottle of brandy.' (MSFOu 106: 128)

Conclusively, the German influence in Livonian is evidenced by ample lexical borrowings but much less by grammatical interference, if at all. In our view, a considerable part of especially Low German words was transmitted to Livonian through Latvian as Raag (1987: 325–328) suspects, because these forms typically have a corresponding word in local Latvian dialects. This is illustrated also by words in Kettunen's (1939) Livonian dictionary. Both Low German and High German borrowings in Livonian are transparent and correspond to the phonological structure of the source language to a large extent. Language change is seen, for instance, in the adoption of word-initial consonant clusters. Phonologically, the treatment of German borrowings in Livonian is clearly different from the adoption of earlier Germanic loanwords in the common Finnic vocabulary, which is a considerably older layer.

Compared to Estonian, the adoption of German loanwords shows that in Livonian they are phonologically closer to the source language, while in Estonian almost all words have been phonologically adaptated. German word-initial consonant clusters, as a rule, occur as single consonants in Estonian (Hinderling 1981: 97–140) following a very old inherent phonological rule of Finno-Ugric languages (cf. Koivulehto 1999). Ariste (1973: 176) claims that certain Livonian words actually share this principle and, consequently, the influx of Low German words into Livonian began during the Middle Ages and lasted for several centuries. Most notably, there were contacts in the early urbanising environment after the foundation of Rīga in the middle of a Livonian-speaking territory and it has been claimed that some inhabitants of Rīga spoke Livonian still in the middle of the 14th century (Ariste 1973: 175, Raag 1987: 325). However, there is no detectable linguistic trace of this.

In comparison with Estonia, there used to be even more Germans in Latvia and the size of the German population in Rīga clearly outnumbered the corresponding group in Tallinn. Hinderling (1981: 180–188) concludes that, in light of vessel and pottery terminology, for instance, the German influence on Swedish and Latvian is much stronger than on Estonian. This emphasises the role of Latvian as the language transmitting German influence to Livonian. In this sense the triangle of Livonian, Latvian, and German resembles the language contact situation between Estonian and Swedish dialects that previously were spoken in western Estonia and the insular coastal region. Lagman (1971: 31) argues that there certainly were some contacts between speakers of German and Swedish in Estonia. However, most of the German loanwords that are attested in these Swedish dialects were transmitted through Estonian. The point is that it is possible that the contact between Livonian peasants and German barons did not develop into an intensive linguistic interaction. In this case, German loanwords in Livonian actually originate from urban networks and the language of merchants, craftsmen, priests, and other German-speaking inhabitants of towns. From this viewpoint the language contact between German and Livonian is ambiguous. There is less evidence of unambiguously direct German influence but much more indication of the indirect diffusion of vocabulary originating from different German variants that played a significant role in networks in which Livonians were involved as well.

Swedish influence on Livonian

Swedish, despite being the language of the Swedish Kingdom, which was one of the largest political powers in the Baltic Sea area in the 17th century and encompassed several different language communities (Andersson & Raag 2012), has left only a very marginal trace in Livonian vocabulary. Unlike different variants of German, which

functioned as the language of a different social and politically privileged class, Swedish was also the language of peasants and fishermen that had settled on the islands of the Gulf of Rīga, along northwestern coastal Estonia and several Estonian islands. However, compared to the Estonians, for instance, the Swedish population had more rights and a better possibility for upward social mobility.

In northwestern Estonia, including both the mainland and islands, the Swedish-speaking population is considered to originate from the Middle Ages and at least partly from its later period when the Germans had already occupied the present-day Latvian and Estonian territory. Linguistically, most Swedish dialects of the northeastern Estonian coastal area are considered to be descendants of Swedish dialects of southern Finland (Tiberg 1962). The Swedish language was still spoken and actively transferred to the next generation in Estonia until World War II when during the German occupation of Estonia most of the Swedish-speaking population was evacuated to Sweden.

In historical Livonian areas around the Daugava River on the eastern shore of the Gulf of Rīga where the German occupation began at the end of the 12th century, the name of the fortress *Holme* ~ *Holmia* is repeatedly mentioned in the Livonian Chronicle of Henry. This name, located at the eastern edge of the region inhabited by the Vikings, has a transparent parallel in Swedish *holm* 'island'. Kūolka, the northernmost Livonian village in northern Courland is first documented in a Swedish rune stone in 1040 and later mentioned in 1387 as *Domesnes (tumisnis)* (Grünthal 2012: 289). This name probably consists of two parts of which the stem *-nes* is obviously motivated by Scandinavian, cf. Swedish *näs* 'isthmus, peninsula' (Hellquist 1948 [1939]: 717).

The assumption of the existence of direct contacts between Livonian and Swedish or, alternatively, earlier Old Livonian and Old Swedish and other Scandinavian variants is based on the fact that the northern coast of Courland actually borders historical Swedish-speaking territories in present-day Estonian Saaremaa (German *Ösel*) and Ruhnu (Swedish *Runö*) on the Gulf of Rīga. The Swedish language survived on Ruhnu until the 20th century and World War II, whereas it became extinct on Saaremaa already earlier. Geographically, Ruhnu is located at a distance of less than 50 km from the Livonian villages of northern Courland. The contacts with the Estonian population were scarce until the 1920s and 1930s when only men could speak Estonian to some extent (Lagman 1979: 5)

It is maintained that Runö was inhabited by a Swedish-speaking population at an early stage of the presence of Christianity in the region and, consequently, earlier and possibly from a different area in comparison with other Swedish-speaking areas in Estonia. The island certainly played an important role for the Germans who aimed at invading the region, which would become the province of Livonia and present-day Latvia from the sea. Local people that already were baptised as Christians were certainly useful for the new rulers of Livonia. Presumably, the Scandinavian settlement of Estonia preceded the Danish occupation of Estonia in 1219 and the German occupation of Livonia on the eastern coast of present-day Latvia in 1204; however, the documented migration of Swedish-speaking people took place only later. The first literary document regarding the Swedish population on Runö is from 1341. (Hedman & Åhlander 2006: 27–29, Lagman 1979: 4, 13, Talve 2004: 37–38.)

In recent archaeological research it has been pointed out that there are considerable cultural parallels between islands with Swedish-speaking populations, most notably Gotland and Saaremaa, during the second half of the first millennium AD. These islands were the landmarks located between the Scandinavian Vikings and their eastern trade partners during the Viking Age between the 10th and 12th centuries. This role undoubtedly supported the increase of the population size of these places and, in light of archaeological evidence, magnified the differences between Saaremaa and the Estonian mainland (Jaanits & al. 1982: 393, 398–399, Kriiska & Tvauri 2007: 160–187, Rullingo 2001: 138–139). Mägi (2005: 25–29) assumes that the social structure on Saaremaa started changing already during the 7th century A.D. However, there was no centralised social or political power until the Late Iron Age and 11th century, probably due to low population density (Mägi 2007: 66–67, Kriiska & Tvauri 2007: 188).

One of the most remarkable recent archaeological excavations in Estonia revealed a mass grave of men that were buried according to Scandinavian traditions in the parish of Salme on the Sõrve peninsula in southern Saaremaa. The remnants of the grave dated to the 8th century and showed that the men, probably Scandinavian warriors, had died violently and were buried in a ship following the burial rites known from Scandinavia (Peets & al. 2011, Peets 2013). The assumption that these dead men once spoke a Scandinavian language is exceptionally well evidenced by material finds. Moreover, the Estonian dialects of the Sõrve peninsula used to have phonological characteristics that, compared to other Estonian dialects, were strikingly different and probably were caused by language contact between Estonian and Swedish (Grünthal 1910: 27-28, 283-286). Other archaeological data and significant changes in finds suggest that there probably was Scandinavian settlement on Saaremaa already during the Early Middle Ages and the second half of the first millennium A.D. (Mägi 2005). The archaic form of certain place names such as Reigi, located on Hiiumaa, etymologically descend from Scandinavian cf. Swedish rök 'smoke', Old Norse reykr id., cf. Icelandic Reykjavík etc. (Ariste 2010 (1935): 212–214) supports this hypothesis.

There are no literary documents on the language of the alleged Swedish (Scandinavian) inhabitation and speech community in southern and western Saaremaa, although this hypothesis is repeated in the literature (Ariste¹ 2010 (1939): 161, Grünthal 1910) and documented facts about individual people who lived in the 15th century prove their Swedish origin (Tarvel 2007: 129–130). The Livonian Chronicle of Henry, a detailed contemporary description of the rise of German colonisation and local ethnography gives a very thorough picture of the territories of present-day Latvia and Estonia in the 13th century but does not refer to local Swedish inhabitation in any manner. Yet, it must be noted that neither the author of the chronicle nor these hostilities ever actually reached the southern parts of Saaremaa and Ruhnu, the assumed places of Scandinavian inhabitation, before the end of the conquest and final battle on Muhu in 1227.

Despite the geographical adjacency and an alleged long-term contact between the Swedish-speaking and Livonian areas, there are

^{1.} In 1930 Ariste published a series of articles about the Swedish population at Sõrve peninsula in the journal *Kustbon*, published by the Swedish minority in Estonia. the mentioned articles were published on 15 May, 20 June, and 8 July 1930 and are accessible at <www.digar.ee/arhiiv/en/periodicals?id.=6655> (accessed 18th August 2014).

only a few words that are or may be of Swedish or Scandinavian origin in Livonian. Viitso (2008: 238) claims that the assumed contact between Livonian and Ruhnu Swedish has left no noticeable traces on either side. A possible areal feature is the change *au > ou that connects them and is attested also in the southernmost Estonian dialects of Saaremaa and certain Latvian dialects. In the current article we maintain that certain words are worth a more detailed analysis in order to evaluate the language contact situation between Livonian and Swedish. Almost all of these words are thematically connected with the sea and marine activities. Livonian Cour *ānkar* 'anchor' (example 22) is a transparent loan from some Germanic or Scandinavian variant, but the exact source of the borrowing is more ambiguous.

Cour ānkaŗ 'anchor', Sal anker id.

(22) *ni adtõ nuoētanõd eņţš jadā sizzõl un laskõbõd ānkay sizzõl 'So they have thrown their nets in and drop the anchor.' (MSFOu 106: 189)*

The differing vowel in the second syllable of the Courland and Salaca Livonian variants suggests that they were borrowed from separate sources, as the latter form corresponds one-to-one with Middle Low German anker 'anchor'. Standard Finnish ankkuri and Estonian ankur, in turn, originate from Swedish ankare, or more precisely, from a relatively early Scandinavian variant, because of the second-syllable -u as in other Scandinavian loanwords. However, the closest Germanic language that has a labial vowel reflecting the original Latin word (cf. below) in the second syllable is Frisian (Santeri Junttila, p.c.). The assumption that the word would originate from Proto-Germanic (EES 51) is incorrect, because it emerged in the Germanic languages only later. There is no significant variation in Estonian and Finnish dialects which suggests that the word spread only recently in the given language area (EMS I 367-368, Mägiste 1982-83: 79-80, SSA 1: 76). Given that Livonian Cour *ānkar*, 'anchor' diverges slightly but in a relevant way from other variants of the same word, the word is possibly a Swedish loan. Nevertheless, there was an identical form in Late Old High German and Swedish ankare (Old Swedish ankar), which actually may have been borrowed from Late Old High German *ankar* 'anchor', originally a descendant of Latin *ancora* (Kluge 2002: 46). Due to the evidence provided by the second syllable vowel in Livonian, the correct conclusion is that Cour *ānkaŗ* 'anchor' originates either from (Old) Swedish or Late Old High German, whereas Sal *anker* descends from Middle Low German.

The Finnish etymological dictionary (SSA 1: 281) labels Livonian *kak* 'cake', a cognate of Finnish *kakku*, *kakko* 'cake; bread, sandwich' etc. and corresponding words in other Finnic languages as a Scandinavian loanword (see example 23).

Cour kak 'cake'

(23) *se kak länd jõdsõ un ni se särdien akkõs siedā kakkõ tagān* 'The cake went first and the orphan [went] after trying to catch that cake.' (MSFOu 106: 179)

There are at least two Livonian words that have been considered as having unambiguous Scandinavian (Swedish) etymologies, namely Cour kola 'island' and Cour kuo'ig 'ship', Sal koig id. The word kola 'island' (example 24) does not have plausible cognates in other Finnic languages (cf. Kettunen 1938: 149) and, thus, is a potential loanword. However, the topographic terminology of the Finnic and Saamic languages often has a very limited distribution and is not attested in other Finno-Ugric languages (Saarikivi 2004: 185-186). In this case, the word is not attested in any other Finnic language either. The word probably originates from Swedish kall, kalla, kalle that in dialects spoken in Finland has the meanings 'frozen ground; block of broken ice; wall covered by stones in the sea; rock (below the water)' that convergently was borrowed into Finnish dialects as well (OFSF, SSA 1: 287). Livonian kola 'island' can be derived straightforwardly from the variant kalla, because the geminate -ll- is shortened in two-syllable words, cf. Livonian *ōla* 'frost', Estonian hall, Finnish halla id. (Posti 1942: 261).

Cour kǫla 'island'

(24) ta võtāb eņţš sigād un lāb sie kǫla pāl tāgiž

'(s)he takes his pigs and goes back to the island' (MSFOu 106: 147)

The Swedish origin of Cour kuo'ig 'ship', Sal koig id. (examples 25ab) is mentioned in Kettunen (1938: 172) and probably proposed already before him. The same word was borrowed into Latvian as *kuģis*, kuge originating either from Swedish kogg or Middle Low German kogge (Mülenbach & Endzelin 1923–32 2: 300) denoting a ship typical of the Hanseatic League. In this case, the Latvian word cannot be the source of the Livonian word, because normally the phonological correspondence between Latvian and Livonian words is one to one (see above). Considering the Scandinavian or Germanic origin of the Livonian word, it has two historically important sound features. Firstly, it may be assumed that the voiced plosive -g(g)- was maintained as such in Livonian and belonged to its phoneme inventory during the adoption of the given word. Secondly, the word demonstrates the depalatalisation of the assumed second syllable *-gi similar to that of k_i occurring as -ig- in Courland Livonian (Itkonen 1982, Kettunen 1938: XXXV, Posti 1942: 183-184).

In general, this kind of epenthesis is not attested in Salaca Livonian as is seen in the corresponding variant Sal *kod*' 'ship', the words Cour *aigā* 'side, bank', Sal *ad'a* ~ *ad'* ~ *aģ* id. (< **akja*), Cour *laigā* 'large, broad', Sal *ladja* id. (< **lakja*), and similar cases. However, in our case, the variants Sal *koig* ~ *koid* 'ship' suggest that either a similar epenthesis is occasionally encountered in Salaca Livonian as well or, more likely, Sal *koig* ~ *koid* 'ship' are actually borrowings from Courland Livonian.

Cour kuo'ig 'ship', Sal koig ~ koid ~ kod' id.

- (25a) *siz voļţõ suodākuoigīd vonnõd purrõdõks pūstõ kuoigīd 'The war ships had sails then, wooden ships.' (MSFOu 250: 26)*
- (25b) se izānd tēļiz īd kuo'ig un roust tānda võtšõm

'The master ordered a ship and people to search [for] her/him.' (MSFOu 106: 182)

Historically, the depalatalisation and epenthesis of the cluster kj is, on one hand, a relatively recent change. On the other hand, it is attested in both main dialects and preceded the secondary palatalisation of word-final consonants. Furthermore, the same type of prevocalisation,

as Pajusalu and Teras (2012) label it, is attested in South Estonian and southwestern Estonian dialects as well. The development of Livonian Cour *ra'dļõ* 'to chop, cut', Sal *rägl* ~ *rāgl* id. < **rakjele*- < **rakjotak*, in turn, suggests that the syncope and loss of the unstressed second-syllable vowel preceded the epenthesis of and depalatalisation of **kj* and also the umlaut of the first-syllable vowel triggered by second-syllable -*i* as seen in the Salaca variant. (Korhonen 1969, Pajusalu & Teras 2012, Posti 1942: 183–184.) Livonian Cour *kuo'ig* 'ship', Sal *koig* ~ *koid* ~ *kod'* id., in turn, cannot be a very recent borrowing, because it descends etymologically from a two-syllable stem **koki* or **kogi*. In Livonian, there is no trace of the geminate -*gg*- present in Swedish and Low German.

A similar shortening of a geminate and secondary lengthening of the first-syllable vowel as was discussed above in (example 24) Cour $k\bar{\rho}la$ 'island' is also seen in Cour $k\bar{\delta}r$ 'wheel, drive, ball' (example 26). This word does not have cognates in other Finnic languages. The etymology has been explained in more detail in another occasion and is quoted below.

Cour kor 'wheel, drive, ball'

(26) kīela k**õ**rad adtõ piškist

'The clock's wheels are small.' (Kettunen 1938: 121)

< *Old Livonian *kerra* < Old Norse *kerra* 'carriage', cf. Icelandic *kerra*, Swedish *kärra*, Danish *kærre* id. < Proto-Scandinavian **karriō(n)* (Grünthal 2008: 184–185). The Scandinavian word originates from Latin *carra*, *carrus* 'four-edged transport vehicle' (Hellquist 1948 [1939]: 548, de Vries 1961: 307)

The word *tīrmaņ* 'steersman, helmsman' (example 27) is a compound word and has obvious parallels in Germanic languages but diverges clearly from German proper. The first-syllable vowel is different from Low German *stur(e)*, Middle High German *stiure*, and High German *Steuer* 'helm, rudder' etc. < Germ. **steuria-*, **stūria* (Hellquist 1948 [1939]: 1100, Kluge 2002: 882, de Vries 1961). Most notably, the consonant cluster *st-* is replaced with a single *t-*. This is a striking difference in comparison with transparent German and Latvian loanwords

in Livonian. The Swedish word *styrman* 'helmsman' is the closest parallel to Livonian $t\bar{r}man$ in which the first-syllable $-\ddot{u}$ - (Swedish -y-) is generally replaced with -i- (Posti 1942: 15–17). In principle, the Livonian word is a potential Swedish loanword. However, the parallel marine concept Low German *stürbord* 'starbord', cf. Anglo-Saxian *stēorbord*, and Old Norse *stjōrnborđi* (Kluge 2002: 882) suggests that there also has been a Low German variant *stür-*, as *stur(e)*, a historical umlaut form, is actually found (Santeri Junttila, p.c.). In the given case both variants *tüürmann* 'steersman' and *stüürman* are attested in Estonian dialects along the coastal area and there are other derivatives of the same stem such as *tüürima* 'steer' and *tüürnik* 'steersman' a more local variant (VMS 2: 593). Historically, both the Livonian and Estonian words originate from Low German but the lack of a wordinitial consonant cluster suggests that the Livonian variant was probably transmitted through Estonian.

Cour tīrmaņ 'steersman, helmsman'

(27) ikš voļ tīrmõņ, tuoi voļ motōrist

'One was a steersman, the other one was a engine operator.' (MSFOu 250: 61)

Conclusively, the main question is why are there so few Swedish or Scandinavian borrowings in Livonian, despite the fact that these speech communities must have been in contact with one another? The Livonian language area was located along Scandinavian and Swedish water routes and speakers of both languages were maritime peoples. The lack of transparent Swedish influence on Livonian vocabulary emphasises the role of multiple language contacts in the eastern Baltic Sea area. Instead of a strict two-way contact between Livonian and Swedish, Estonian and, most notably, Low German not to forget High German were also involved in this language contact situation. In spite of the obvious fact that massive amounts of German loans were transmitted into Livonian through Latvian, the detailed description of how this vocabulary, especially from Low German, came to be adopted by Livonian is a major challenge for future research. This is true also from the viewpoint of contacts between Swedish and Livonian.

Estonian influence on Livonian

Finally, a parallel case of the traces of contact between geographically adjacent speech communities concerns the relationship between Livonian and Estonian, two genetically related and typologically similar languages. The unambiguous listing of contact-induced changes and identification of loanwords is, in principle, much more complicated in comparison with the previous situations. This particular case is a typical example of the difficulty in discerning distinctions between inherited and diffused similarities, as the relationship between Estonian and Livonian reflects a prolonged and uninterrupted diffusion of cultural and linguistic traits across this area (Aikhenvald 2006: 7) lasting until the end of the active use of Livonian by the Livonian speech community. In Kettunen's (1938) dictionary, there are 1600 word stems that occur both in Estonian and Livonian. It is estimated that there are approximately 350 shared borrowings from other languages such as German that show convergent lexical innovations. Historically, the remaining words represent three geographic isoglosses in the framework of the Finnic languages. These are words with a (i) common Finnic, (ii) western Finnic, or (iii) southern Finnic distribution. There are 70 basic word stems that are shared between Livonian and North Estonian but are lacking in South Estonian (Koponen 1990).

The hypothesis of Estonian influence in the two documented Livonian varieties, Salaca Livonian and the more thoroughly documented variants of northern Courland, has been intertwined only superficially in earlier studies. Kettunen (1938), for instance, lists tens of words mainly representing Courland Livonian that, presumably, were borrowed from Estonian. Surprisingly, so far this topic has not been dealt with in more detail, although the assumption of borrowing of an adjacent Finnic variant is most natural and has many parallel cases in the Finnic language area (Ariste 1981: 52–63, Grünthal 1998, 2007, Suhonen 2000, Söderman 1996).

Likewise, Estonian influence in Salaca Livonian has been mentioned in the literature (Pajusalu 1996: 63, Tanning 1958) but only scarce evidence has been presented in support of individual phenomena that often have a wider areal context (cf. Pajusalu 2012, Pajusalu & Teras 2012). Traditionally, it has been assumed that there was no direct

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geographical connection between the Livonian and South Estonian areas in the 13th century before the German invasion (Ariste 1954: 260). However, recently Pajusalu (2013) has examined the southwestern Estonian language area in light of lexical and phonological data. He concludes that contrary to what was assumed earlier there are several features that connect the Estonian dialects and Salaca Livonian on the eastern coast of the Gulf of Rīga. According to him, Livonian used to be spoken in the area of the present-day Häädemeeste parish in southwestern Estonia as evidenced by substrate features that can be detected in the Estonian-German dictionary by Salomo Heinrich Vestring published in the beginning of the 18th century.

The identification of Estonian influence in Livonian follows the main principle of the description of language contacts: lexical influence precedes grammatical influence and contact-induced major morphosyntactic changes take place only if there is ample lexical borrowing. There are also differences in the adoption of parts of speech from a foreign language. However, the contact with Estonian diverges notably from all other language contacts of Livonian in a significant way. The languages are genetically related, they share the same basic vocabulary and grammar, and they are typologically similar. The typological similarity is seen in parallels in the inflectional system, such as the shift to flexive forms of the grammatical cases and an increase in analytic constructions at the expense of a rich suffixal system. The category of possessive suffixes, for instance, is lost in both languages.

Kettunen simply includes a comment regarding the assumed Estonian origin of individual lexical entries. The main criteria for such a classification are not explicitly described in the entries of his vocabulary. However, two main principles illustrate his classification. Firstly, words noted as Estonian borrowings typically have a limited geographical distribution and only a few of them are represented in both main dialects of Livonian. Secondly, several words display historically anomalous sound forms, due to which they cannot be explained as genetically related variants. Kettunen himself, the author of works describing the sound history of Estonian and Livonian other languages, knew this method perfectly. The idea of mutual borrowing between Estonian and Livonian probably came to Kettunen's mind during the writing of his vocabulary, because in terms of alphabetic order, words marked as possible borrowings are distributed unevenly. The following words, for instance, are marked as Estonian borrowings: Sal. *jēle* 'yesterday' (< Est. *eile* id. ~ Cour. *e'ggil* 'yesterday' (Kettunen 1938: 90)), Cour. *järsk* 'abrupt' (? < Est. *järsk* id. (op. cit. 97)), Cour. *karp* 'casket, tin' (< Est. *karp* 'box' (op. cit. 107)), *kerīkš* 'stove (in the bathroom)' (< Est. *keris* 'stove' (op. cit. 115)).

In general, a closer look at those words Kettunen notes as Estonian borrowings shows that, as a rule, they have a limited distribution. They are parallel variants of phonologically more regular Livonian words; they represent the very fragmentary literary use of the language and application of the model of a closely related language and originate from the Bible translation, for example *jutlõks* 'sermon' (< Estonian *jutlus* id. (op. cit. 97)); or are hapax legomena, attested only once, for example *kerīkš* given above.

Nevertheless, we maintain that the assumption on Estonian lexical influence in Livonian is correct and even grammatical influence is possible because of typological similarity and genetic adjacency, although syntactic influence, for instance, will not be discussed here. The following etymologies are presented as examples of more general terms of borrowing vocabulary from Estonian to Livonian and identifying the details of language contact in the evidence of individual words. There are numerous additional cases that would deserve an accurate analysis that, presumably, would shed much more light on this particular contact situation. Moreover, there are narrative data that describe various social and cultural contacts between Livonian-speaking Courland, Estonian-speaking Saaremaa, and other adjacent areas. This is briefly demonstrated in examples (28–29). The first example originates from the northernmost village Kūolka and the second example from Vaid, another village on the northern coast of Courland.

(28) siz lapst kädst īrgist kizzõ pōțiŗi sōrmō kīelkõks

'Then they started to ask the children prayers in the language of Saaremaa [Estonian].' (MSFOu 250: 24)

(29) se kilā nutāb dūmiļ kilā, kōrand nim voļ bažā. sem leţţ kilā, bet vanā bažā nai voļ sōrli. bažā voļ leţţkielniekā
'That village is called Dūmiļ village, the house was called Bažā.

It is a Latvian village, but the wife of old Bažā was an Estonian. Bažā was Latvian-speaking.' (MSFOu 250: 56)

In fact, the contact between Livonian and Estonian continued until very recently. At the end of the 19th century inhabitants of Saaremaa were reported as working in the Livonian villages of Courland, which, presumably, increased the awareness of the Estonian language among Livonians (Ariste 1981: 79) and led to an influx of Estonian words.²

The distinguishing of borrowed words from inherited ones between two closely related languages, such as Estonian and Livonian, is possible only if such words are affected by a sound change that did not occur in one of the two languages. This is illustrated in the relationship between these words found in Courland Livonian: $ar\bar{u}$ 'idea' (example 30) and $\bar{o}ra$, $\bar{a}ra$ 'thought, idea' (Kettunen 1938: 268). The latter example is an etymological cognate of Finnish *arvo* 'value, price', Estonian *aru* 'mind; amount', *arv* 'number, amount', and parallel words in other Finno-Ugric languages (SSA 1: 85). Livonian Cour $\bar{o}ra$, $\bar{a}ra$ 'thought, idea' shows a regular lengthening of the first-syllable vowel characteristic of words with a historically similar syllable structure.

Livonian Cour $ar\bar{u}$ should reflect, in turn, a syllable structure of (C)VCV, if it is and example of inherited Finnic vocabulary. The expected form of *arvo* would be $*\bar{o}ra$, the lengthening of the first syllable as in $k\bar{o}ra$ 'hair; colour' < karva and $t\bar{o}ra$ 'tar' < terva. However, the long second-syllable labial vowel in Livonian $ar\bar{u}$ reflects the vowel change o > u that took place in Estonian following the loss of -*v*- in Estonian aru < arvo. In example (30) the word, inflected as $ar\bar{u} : arr\tilde{o}$ idea-PRT, occurs in a phrase $\ddot{a}b s\bar{a}t arr\tilde{o}$ that, moreover, has a phrasal equivalent in Estonian aru saada 'to understand'.

Cour arū 'idea'

(30) rāndalist āt kupsõ un sprīežõbõd lețţkīeldõ, äb sāt arrõ 'The Livonians are together and chat in Latvian, do not understand [Livonian].' (MSFOu 250: 13)

Kettunen (1938: 15) lists other examples in which Livonian $ar\bar{u}$ 'idea' always occurs in a syntactic context with a phrasal meaning that has a parallel in Estonian. The borrowing of phrasal units with a fixed meaning is an indication of intensive language contacts and considerably decreases the likelihood of convergence in the lack of similar inherent phrases in Livonian. Wälchli (2001) points out that there actually is an areal continuum in the use of verb particles in Latvian, Livonian, and Estonian. The similarity is not restricted to obvious borrowings but extends to functional parallels between grammaticalised concepts such as 'hand', the development of 'hard' > 'closed', etc.

There are other cases similar to example (30). The use of the verb phrase Cour *i'lzõ votšõ* 'to search, look for' as in (31) corresponds to Estonian *üles otsima* id. which, in turn, is a translation loan from German *aufsuchen* 'to seek; haunt; attend' etc. The latter form is a bimorphemic word consisting of an adverb *auf* 'up; on' and *suchen* 'to seek', a pattern that is replicated in Estonian and Livonian and that was originally introduced into literary Estonian by German priests in the 16th century (Hasselblatt 1990: 135).

(31) ni adtõ võtšõnd iļdz

'You have searched [for him].' (MSFOu 106: 90)

There are additional similar examples, which will not be discussed in more detail here. The assumption of lexical influence of Estonian in Livonian is supported by the existence of words that originally were borrowed into Estonian from some other language and, thus, cannot originate from a common protolanguage.

A German borrowing is represented in Cour $k\ddot{a}p$ 'cupboard' (example 32) that, similarly to the previous examples, displays an *i*-umlaut of *a* (< **kappi*) characteristic of Livonian. The Salaca variant *kaep* id. (Winkler & Pajusalu 2009: 78) is a parallel loan evidenced by the first-syllable vowel. However, as was seen above, German loans

^{2.} The language contact between Estonian and Livonian is mentioned in the Wikipedia entry of Livonian language (<<u>http://en.wikipedia.org/wiki/Livonian_language</u>>; visited 4 January 2014). However, the claim that there are as many as 800 Estonian loanwords in Livonian, based on Décsy's (1965: 82) information, is exaggerated.

quite regularly have preserved word-initial consonant clusters in Livonian, therefore, Middle Low German *schap* 'cupboard' should occur as **skap* in Livonian. The corresponding Estonian word *kapp* : *kapi* cupboard-GEN, however, matches both Middle Low German and, after the loss of the word-initial consonant cluster, also Livonian. Furthermore, the *i*-stem genitive form in Estonian explains the rise of the umlaut form in Livonian in which the inflectional stem does not alternate (Viitso 2008: 111, 400–401). The simplification of the inflectional stem is common in loanwords. Alternatively, one must assume that the given word belongs to the oldest layer of Low German borrowings in Livonian that replaced a word-initial consonant cluster with a single consonant (cf. Ariste 1973) and that the word was borrowed in parallel into Livonian and Estonian at first occurring as a two-syllable stem **kappi*.

Cour käp 'cupboard'

(32) mingiz võţīmõks ni klõkšūb siedā käppõ

'With which key should [I] close that cupboard?' (MSFOu 106: 185)

Loanwords often have a much more limited meaning in comparison to the corresponding word in the source language. This is illustrated by Estonian *laat* 'market', which originates from Middle Low German *afflate* 'absolution' < $avl\bar{a}t$; cf. Dutch *laten*, Old Norw. *lāta* 'let', etc. Markets used to be organised in connection with church servicees which explains the difference in the meaning between the Estonian word and Livonian *l* $\bar{q}t$ 'church service' (EES 218–219, Kettunen 1938: 205; (example 33).

Cour lot 'church service'

(33) päp jõvā voļ **lot** nopiddõn

'The priest had already held the [church] service.' (MSFOu 250: 38)

The appearance of Christian terminology had two important periods. Firstly, the violent conversion of the Livonians took place in the beginning of the 13th century and the gradual adoption of western Christian terminology began during the same era at the latest as, for instance, was seen in the discussion of $p\bar{\rho}t\bar{\rho}r$ 'prayer' above. The adoption of

eastern Christian terminology had taken place already earlier (see, example 8). Secondly, the Reformation in the 16th century and the spread of Protestantism gradually promoted the adoption of the local language in religious ceremonies and, among other factors, played a very important role in the development of the Swedish, Finnish, Estonian, and Latvian literary languages.

From a religious viewpoint Easter is among the most significant holidays in all Christian churches. The Livonian plural form Cour *lejāvõtāmõd* 'Easter' (← *lejā* 'meat' + *võtā-mõ-d* take-INF-PL 'taking'; example (34)) corresponds etymologically with Estonian *li*havõte, lihavõttepüha 'Easter', whereas Sal pašälda (püad) 'Easter (holy days)' (Kettunen 1938: 277, Winkler & Pajusalu 2009: 145) probably incorporates a Slavic word stem comparable with Russian pasha 'Easter', Greek pásya id., and reflects Orthodox and Byzantine tradition. In Estonian dialects, the concept lihavõttepühad 'Easter' alternates considerably showing the etymological false friends of this compound word. The second morpheme of liha 'meat' + võte 'taking' is represented as -võtme, referring to 'key' (Estonian võti 'key' ~ *võtta* 'take'), *-vet(t)e*, referring to 'water' (Estonian vesi 'water' : vete water.PL.GEN), etc. (EMS V: 164-165). Kettunen (1938: 187, 483) mentions a parallel form of Cour lejāvõtāmõd 'Easter' reported in Pizā lejāutām id. in which a more archaic form uttõ 'take' of the verb võttõ id. is found. This shows that the bimorphemic character was transparent and not lexicalised to the same extent as in those Estonian dialects in which secondary semantic blurring took place.

Cour lejavõtāmõd 'Easter'

(34) *kui jõvīst minā um nopiddõn tämpõ eižmist lejāvõtāmõd pivā 'How well have I celebrated the first day of the Easter holiday today.' (MSFOu 250: 16)*

Considering the alleged contact between Estonian and Livonian, there is an extralinguistic reason to suppose that the Estonian language triggered the use of the parallel form in Livonian as Kettunen (1938: 187) probably assumes when he characterises the Livonian word as a possible Estonian loanword. In principle, the Christian terminology in Livonian is borrowed from other languages and the word *lejāvõtāmõd* 'Easter' refers to the fact that a fasting period precedes the Easter holiday and that Easter marks the time when it was once again permitted to eat meat. Unlike the word *talšpivād* 'Christmas' ($\leftarrow t\bar{q}la$ 'winter' + *pivā* 'holy') that has an etymological parallel in South Estonian *talsipühiq* ~ *talvistõpühiq* id. (VMS 2: 485), 'Easter' can only be connected with a religious feast not a particular time of the year.

We maintain that the hypothesis of the Estonian origin of the Livonian word for 'Easter' and its adaptation into a bimorphemic Livonian form is correct because the concept is probably inherited from a tradition occurring in the local language. However, it must be noted that the symbolic importance of the end of fasting and return to the eating of meat dishes is reflected in other languages as well. In Hungarian the corresponding word *húsvét* 'Easter' is also a bimorphemic compound word ($\leftarrow hús$ 'meat' + *vét*, a derivative of *venni* : *vesz* 'take'). What is even more important with respect to the adoption of Christian traditions in local languages is the fact that the Hungarian compound word is mentioned in early literary documents already in the 13th century (EWU 591) long before the Reformation.

Finally, we will discuss the evidence concerning two Livonian adverbs *sä* and *va* that cannot be interpreted as the results of endogenous changes but instead obviously were borrowed from Estonian. Adverbs are usually borrowed easily as a result of language contact, because instead of following morphological rules as nouns and verbs do, they are lexicalised forms that are used as mobile discourse particles that are not hierarchically subordinated to any other constituents. In the Finnic languages, adverbs often descend from pronominal stems but also other diachronic paths such as verb forms can be demonstrated. Local and temporal adverbs that resemble content words in many respects often have etymological cognates in various Finnic languages. Discourse particles are, as a rule, the shortest ones and etymologically more ambiguous because they do not have transparent parallels that would reveal their origin, unless they are new loanwords.

The two one-syllable adverbs at issue, *sä* and *va* (Viitso 2012: 280, 348), occur in Livonian spoken data and have identical equivalents in Estonian. Kettunen (1938: 392, 463) mentions both but only compares them with the Estonian words, for which he probably did

not have any plausible etymology. The assumption regarding the borrowing of these adverbs is motivated both by phonological and syntactic criteria.

Phonologically, Livonian displays very few one-syllable words ending in a short vowel. Personal pronouns such as ma 'I' and sa 'you [SG]' are exceptions whereas the plural forms $m\bar{e}g$ 'we' and $t\bar{e}g$ 'you [PL]' are more archaic and have preserved the final plosive. Most of the one-syllable words in documented Livonian descend from a historical bisyllabic stem that, more generally speaking, is the basic phonological word structure at the Finnic and Finno-Ugric protolanguage level. Historic two-syllable words occur as monosyllables in Livonian, if the first syllable was long and, thus, had a long vowel, diphthong, or ended in a consonant. For this reason one-syllable words typically end in a consonant in Livonian.

Syntactically, Livonian $s\ddot{a}$ and va are located at the same position as their Estonian correspondences. Livonian $s\ddot{a}$ (example 35a) and Estonian $s\ddot{a}h$ (examples 35b–c) is an proclitic particle that is used in a sentence-initial position, typically referring to a gesture with which the speaker addresses the following proposition to the recipient.

Cour sä

(35a) *sä sinnõn kōi, se kōi um võnd jarā aļtõn* 'There you have a spoon, that spoon had grown mould.' (MSFOu 106: 108)

(35b) (Estonian) *Säh*, *võta raha!* 'There you are, take the money!' (EKSS 742)

(35c) (Estonian) *Säh*, *poiss, siin on su raamat*. 'There you are, boy, here is your book.' (EKSS 742)

The Estonian etymological dictionary (EES 2012) does not mention either $s\ddot{a}$ or va. In our view, the former probably originates from the deictic pronominal stem se and its inflectional variant denoting location as manifested in Estonian *siin* 'there', Finnish *siinä*, and Veps *sigä*. If this assumption is correct, the stem **sikä*- should occur as **sig-* in Livonian if it were an inherited word. The syntactic position of Livonian *va* (example 36a–b) is, again, strikingly similar with its Estonian equivalent (example 36c–d). Both are juxtaposed referents of the subject or a constituent that is co-referential with the subject (36d) and precede the head of the phrase and its attributes.

Cour va

- (36a) *siz se va mēstar um rõkāndõn tämkõks puol-ied sōņõ* 'Then the master has spoken with him until midnight.' (MSFOu 106: 85)
- (36b) tam kītõn laz se va mikīl tulgõ täm kōzgõnd päl spēļõm
 '(S)he said that Mikīl should come and play at the wedding.'
 (MSFOu 106: 190)
- (36c) (Estonian) *Kes see muu oli kui va Tontu Toomas!* 'Who else would that have been than [that] Tontu Toomas! (EKSS 666)
- (36d) *Viiu oli va jonnakas plika.* 'Viiu was [what a] capricious girl.' (EKSS 666)

Viitso's Livonian dictionary (2012: 348) includes a parallel adverb $v\bar{a}$ 'look!, watch!' that has similar variants va and vaa in Estonian dialects (VMS 2: 621). The borrowing of adverbs has special importance for understanding the nature of the contact between Estonian and Livonian. Unlike content words that are co-referential with concrete objects, acts, and cultural contents, adverbs are discourse particles that are used in a speech situation. They fill the gaps between shifts, phrases, sentences, questions and answers, claims and objections characteristic of a speech situation. In general, this explains why they are easily transferred from one language to another. Although the borrowing of discourse markers does not imply code-switching, for instance, their discourse frequency is conducive to their borrowability and triggers similarity of their use and position (Curnow 2001: 428; cf. Aikhenvald 2001: 17). Thus, in this case, the borrowing of discourse particles demonstrates the simultaneous use of these two

closely related languages, in terms of a process that is labelled as receptive multilingualism in contemporary research into multilingual communication that typically takes place between languages closely related to each other (Thije & Zeevaert 2007). This has been recently investigated and demonstrated in informal linguistic test situations focusing on the interaction between Finnish and Estonian (Härmävaara 2013). Historically, it is likely that similar communication between speakers of different Finnic languages and dialects has taken place in various areas in the northeastern Baltic Sea area.

Therefore, the contact between Estonian and Livonian should be analysed in much more detail. Ariste (1954: 266-267) claims that the contact between Livonian and Estonian dialects on Saaremaa originates from prehistoric times. However, the evidence comes from more recent contacts. The identifying of lexical borrowings demands a detailed description of areal distribution of individual words and the diffusion of phonological changes and semantic innovations. The infuence is not limited solely to lexical borrowings but phrasal units indicate grammatical interference as well. Finally, the existence of borrowed discourse particles has special importance because they illustrate the character of the language contact in practise. In individual families and mixed marriages both languages may have been used in parallel. As regards the speech community, the particles demonstrate the functional context in which they were borrowed, a situation that in terms of contemporary linguistics could be called receptive multilingualism between Livonian and Estonian. Compared to other languages that have influenced Livonian, Estonian is the other language in addition to Latvian that has clearly been of communicative value for the Livonians.

Conclusions

In his article about Livonian in a genetic, areal, and typological perspective, Wälchli (2000: 211) points out that while looking more closely at Livonian, there is nearly always a subtle intertwining of language contact, a continuation of inherence and endogenous change. Considering the impact of language contacts on Livonian, the identification of different sources of lexical borrowing and grammatical change requires a meticulous analysis. The speech community had been under constant erosion when it was first documented and the small size of the population made the language even more receptive to foreign interference.

In this article we aimed at an overview of those historical and modern languages that have influenced Livonian vocabulary and grammar. The Latvian influence is undoubtedly most significant as there is hardly any structural level that would have avoided it. In this case, language contact is evidenced by an increase in language shift, the giving up of the ancestral language, and the introduction of massive amounts of non-Livonian elements by Livonian speakers. Latvian influence is not limited merely to Latvian words but in many cases it explains why Livonian grammar diverges from that of other Finnic languages. The Latvian influence originates from the time when most or practically all Livonian speakers were bilinguals. The multiplicity of Latvian influence is also seen in the fact that it transmitted many Low German loanwords into Livonian. Furthermore, the Livonian speech community was never in direct contact with Slavic and Russian, only individual Livonians were. Hence, we assume that those words such as *päp* 'priest, pastor, minister' and *rišt* 'cross', which originate in Slavic, were transmitted through Estonian following cultural innovations such as the adoption of Christianity, whereas modern Russian words such as *povār* 'cook' were transmitted through Latvian: < Latvian (Dundaga) povars id. < Russian nosap id. (Kettunen 1938: 307).

The number of German loanwords in Livonian is almost as striking as the number of such loans found in Latvian. However, vocabulary originating from Low German and High German has a very different sociohistorical importance. The first contacts between speakers of Low German and Livonian took place during the violent colonisation of the Baltic area in the 13th century. Aside from the existence of a sharp political and social hierarchy, Low German was an important language of trade in the Late Middle Ages in the Baltic Sea area. More locally, it was also the language of many landlords who were the new owners of the fields and labour and it influenced the local language in the same way as it influenced Estonian. High German influence in Livonian, in turn, through its dominant position in the present-day German-speaking world, is more recent and reflects the increasing importance of literary culture. There is a major challenge for future research to distinguish between loans that witness a direct contact between German and Livonian and those that have parallels in Latvian and, most likely, were adopted as part of the massive influx of Latvian vocabulary into Livonian. Ultimately, the German loanwords are not a homogenous bulk of new concepts but chronologically divergent and represent different layers and variants of language.

The borrowing of Latvian and Germanic loanwords did not involve their adaptation to Livonian phonology but the phonological system itself underwent a major change and allowed numerous new sounds and phoneme structures.

Local contacts between geographically adjacent languages are one of the most obvious presuppositions of convergence and contactinduced change. In the case of Livonian, the role of two geographically neighbouring languages, Estonian and Swedish, is double-edged. In comparison with Latvian and German, it is much more difficult to identify the Estonian influence in Livonian because the languages are genetically related and even late innovations may be considered convergent. Here, too, a detailed description of local isoglosses and the source of innovations is needed. The assumed Estonian influence on Livonian is most evident in cases in which genetic relatedness between two variants of a given word, for instance, must be excluded. In the section discussing the role of Estonian influence we showed that, actually, there are several words that can only be Estonian loanwords as Kettunen already assumed in certain cases. The borrowing of adverbs shows that the Estonian and Livonian languages were actually involved in mutual discourse. Undoubtedly, many details belonging to this area will be uncovered in the future.

Given the importance of water routes and the close location of Swedish speech communities on Saaremaa and Runö, one would assume that there must have been contacts between Livonians and Scandinavians in earlier times as well. Livonian and Swedish speakers used to be close neighbours for several centuries under different political circumstances. Yet, the number of Swedish loanwords is unimportant. There are only very few words that clearly originate from Swedish. However, this fact has more importance from a sociohistoric viewpoint because it generates a list of questions. The languages certainly were not mutually intelligible. What language did the Livonians and local Swedish communities use in mutual communication? Was it Low German, the language of trade in the Baltic Sea Area during the Middle Ages and later? If it was Low German, why are so many German words actually borrowed through Latvian into Livonian? Could the Swedish population speak Estonian? In western Saaremaa, for instance, the language shift from Swedish to Estonian very likely happened once, although there is no documentation of the process itself. Or did the Swedish-speaking population simply move away?

The multidimensionality of Livonian language contacts is illustrated in figure 1.

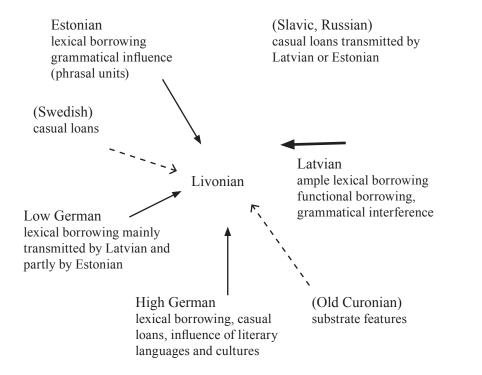


Figure 1. The influence of language contacts on Livonian.

Multiple language contacts as evidenced in Livonian are one of the main criteria for defining a language area. The list of defining a linguistic area, alternatively Sprachbund, consists of the parallel existence of three or more languages in a geographical region, shared structural features and contact, and parallel features that are not accidental or inherited (Thomason 2001: 99, Muysken 2008: 3–4). Earlier, Wälchli (2001: 419–430) has noted that the use of verb-particles and preverbs in Estonian, Livonian, Latvian, and Lithuanian is a signal of an areal continuum. The diversity of contact-induced changes in Livonian supports this view, the parallel use of several languages in a limited geographical region in the eastern Baltic Sea area, alternatively the Gulf of Rīga area.

A number of topics were not discussed. For instance, the relationship between Livonian and the Curonians belongs to the general framework of language contacts in the Baltic countries. In Baltic studies, it is commonly assumed that the language of the Curonians diverged considerably from Latvian and Lithuanian (Kiparsky 1939, Vaba 2012, 2014). There is indirect language historical evidence that this assumption is correct. However, this assumption concerning Curonian also intertwines with the history of the Livonian language, most notably because it was last documented in northern Courland. It is difficult to give a terminus post quem for the periodisation of the Livonian language in Courland. Still it must be noted that the first reports of Livonian villages originate from Scandinavian sources in the Middle Ages. In the 13th century, after the German bishops and Catholic Church had colonised the territory of modern-day Latvia and Estonia, it took a while until the new rule was established. In 1231 there was a conflict between Nikolaus, the Bishop of Curonia, and Balduin, the Bishop of Rīga. The former did not recognise the agreement between Balduin and the Curonians and made an alliance with the Livonian Order to baptise the Livonians and the Curonians (Hedman & Åhlander 2006: 23). Were all these Curonians speakers of a Baltic language or, alternatively, simply inhabitants of Courland and speakers of Livonian?

Finally, this overview does not reveal anything noteworthy concerning pre-Christian contacts that would demand the reconciliation of early Livonian language history. Most of the loanwords originating from different German variants and Latvian reflect the phonological structure of the source language quite consistently, although in certain Low German borrowings some modification has taken place. Historically, the evidence of language contacts and especially borrowed vocabulary suggests that a considerable part of the innovations originates only from the second millennium AD. So far, there is less evidence of significant earlier isoglosses between early Livonian and other Finnic varieties in the light of vocabulary.

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Liivi kielikontaktien risteyksessä

Riho Grünthal

Pitkäaikainen ja läpikotainen latvian kielen vaikutus on liivin kielen läpinäkyvimpiä tunnusmerkkejä. Se ilmenee sekä monipuolisesti dokumentoidussa kuurinmaanliivissä että hajanaisemmin tallennetussa Liivinmaan eli salatsinliivissä. Latvian kautta liiviin kulkeutui myös merkittävä osa saksalaisperäistä sanastoa, ja usein samat lainat tunnetaan myös latvian murteista. Saksan vaikutus on osoitus vuosisatoja jatkuneesta kielikontaktitilanteesta, ja erilaisten saksan varianttien jäljistä liivin puhuma-alueilla. Vanhinta kerrostumaa edustavat keskialasaksalaiset lainat, nuorinta yläsaksalaiset, saksan kirjakielen mukaiset lainat. Valtaosassa saksasta liiviin lainautunutta sanastoa näkyy sama äännejärjestelmän muutos kuin latvialaislainoissa: esimerkiksi sananalkuiset konsonanttiyhtymät ja soinnilliset äänteet ovat levinneet liiviin kielikontaktien mukana.

Edellisiä heikommin tunnetaan muiden kielten vaikutusta liiviin. Sellaisia on kuitenkin perusteltua olettaa. Viimeinen liivinkielinen yhteisö eli Kuurinmaalla, jonka ohi kulki viikinkien ja muiden skandinaavien merireitti Riianlahden pohjukkaan Daugavalle. Vironkielinen Saarenmaa taas sijaitsee vain muutaman kymmenen kilometrin etäisyydeltä Kuurinmaan liiviläiskylistä. Liivistä onkin osoitettavissa selvästi virosta lainattua sanastoa, joka poikkeaa etymologisesti samaa yhteisitämerensuomalaista alkuperää olevasta sanastosta. Sen sijaan skandinaavista tai ruotsalaisperäistä vaikutusta on erittäin vaikea osoittaa, korkeintaan yksittäisiä sanoja.

Artikkelissa luodaan yleiskatsaus kuurinmaanliivin kontakteihin naapurikieltensä kanssa. Yksittäiset sanasto- ja lause-esimerkit valottavat kunkin kontaktitilanteen luonnetta. Samassa yhteydessä kartoitetaan myös kielikontaktitilanteen sosiohistoriallista taustaa.

Lībieši valodu kontaktu krustceļos

Riho Grünthal

Viena no pamanāmākajām lībiešu valodas iezīmēm ir ilglaicīga un pamatīga latviešu valodas ietekme. Tā novērojama gan daudzpusīgi dokumentētajā Kurzemes lībiešu valodā, gan mazāk rūpīgi saglabātajā Salacas lībiešu valodā. Ar latviešu valodas starpniecību lībiešu valodā ienācis nozīmīgs daudzums vārdu, kuru saknes meklējamas vācu valodā, un bieži šie paši aizguvumi sastopami arī latviešu valodas dialektos. Vācu valodas ietekme ir radusies gadsimtiem ilguša valodas kontakta rezultātā, no dažādu vācu valodas variantu atstātajām pēdām apgabalos, kur runā lībiešu valodā. Vecāko slāni veido viduslejasvācu valodas aizguvumi, kurpretī jaunāko – aizguvumi no augšvācu valodas, kas atbilst literārajai vācu valodai. Lielākajā daļā no vācu valodas aizgūto vārdu novērojamas tās pašas izmaiņas skaņu sistēmā kā latviešu valodas aizguvumos: piemēram, līdzskaņu grupas vārda sākumā un balsīgās skaņas valodā ir izplatījušās līdz ar lībiešu valodas kontaktiem ar citām valodām.

Par citu kā augstāk minēto valodu ietekmi uz lībiešu valodu ir zināms daudz mazāk. Ir tomēr pamats uzskatīt, ka tāda ietekme pastāv. Pēdējā lībiski runājošā sabiedrība dzīvoja Kurzemē, gar kuru virzījās vikingu un citu skandināvu jūras ceļš uz Daugavu Rīgas jūras līča lejasdaļā. Savukārt Sāmsala, kur runā igauņu valodā, atrodas vien pārdesmit kilometru attālumā no Kurzemes līvu ciemiem. Igauņu valodas aizguvumi lībiešu valodā ir skaidri apzināti, turklāt tie atšķiras no vārdiem, kam etimoloģiski ir kopēja Baltijas jūras somuguru izcelsme. Turpretim skandināvu vai zviedru valodas ietekmi nav viegli pierādīt – atrodami, augstākais, atsevišķi vārdi.

Raksts piedāvā vispārēju apskatu par Kurzemes lībiešu valodu kontaktiem ar kaimiņu tautām. Atsevišķi vārdu un teikumu piemēri raksturo noteiktu valodas kontaktu iedabu. Reizē tiek ieskicēts arī valodas kontaktu vēsturiski sociālais fons. JAN HENRIK HOLST Hamburg

On the theory of a Uralic substratum in Baltic

This paper deals with the question whether Proto-Baltic, the proto-language from which the Baltic languages evolved, had a substratum from Uralic – to be more exact, from Balto-Finnic. Such a theory has been put forward by Witold Mańczak (Mańczak 1990, 2008). An investigation of the arguments for this claim, however, reveals that doubts are justified: there is too little evidence to substantiate the hypothesis.

1. Introduction

An issue in terminology ought to be addressed first. For the languages which are called *itämerensuomalaiset kielet* in Finnish and *Ostsee-finnisch* in German, there is not yet an established usage in English: they are called *Balto-Finnic* (e.g. Comrie 1981) or *Fennic* (e.g. Viitso 1998) or *Finnic* (e.g. Laakso 2001). Advantages and disadvantages of these terms cannot be discussed here in detail, but in this paper I will use *Balto-Finnic* because it indicates clearly which group is meant, while the two alternatives just imply that the languages have to do with Finnish but leave open the more exact relation to this language.

Balto-Finnic is a subgroup of the Uralic language family, representing one sub-branch in a large family tree. The other group of languages which this paper will be concerned with is Baltic, a branch of Indo-European. The two language groups are geographically contiguous and in fact have been so for at least 2000 years, and possibly even much longer.

It is well-known that there are various language contact phenomena which link Balto-Finnic and Baltic. This is not surprising, given that they are neighbours and have been so for a very long time. What is at issue, however, is in many cases the more exact circumstances, i.e. it often requires scholarly discussions whether certain observations are due to language contact or not, how the historical developments are to be envisaged more exactly, etc. The circumstances may also lead to the necessity to deal with methodology sometimes.

In my opinion, in some issues one even has to take into account the Indo-Uralic hypothesis, holding that Indo-European and Uralic are ultimately related – a question which, of course, is still open today and is extremely difficult to assess. Probably Indo-European linguistics and Uralic studies will have to reconsider the reconstructions of their proto-languages first. The Indo-Uralic question will become relevant only for few phenomena, but there may be some. For example, as is known, the use of the partitive in Balto-Finnic and the use of the genitive in Baltic show similarities, see e.g. Laanest (1982: 301), Larsson (2001: 244–247). It would be tempting to attribute this to language contact without further thinking. Slavic would then have to be included as well in some way because it behaves much the same as Baltic. The partitive in Balto-Finnic had the suffix *-ta, *-tä (Laanest 1982: 158) and can be traced to a Uralic case called ablative (Laanest 1982: 160), while the genitive in Baltic and Slavic, at least for the ostems, goes back to an Indo-European case called ablative, too, and once had a dental plosive as well. Thus, both the case itself and its syntactic usage may be shared heritage. Much depends, in this case, on what the uses of the ablative are in further branches of Uralic and of Indo-European. In reflections of this kind, it is useful to keep in mind that Balto-Finnic and Baltic are often regarded as relatively conservative branches within their respective families. Therefore, it may be necessary not only to focus on the fact that Balto-Finnic and Baltic are neighbours but also on their conservativity. In certain instances it may also be that language contact does play a role, but not in making the similarities come into being, but in helping to preserve archaisms which were already present. Though interesting, these questions cannot be dwelt upon here. My aim was only to draw attention to the fact that, while research on language contact between Balto-Finnic and Baltic can be quite successful in many areas without ever asking the question whether these languages are ultimately related, there may

also be areas in which one could run into difficulties when never addressing the question of relationship.

Mostly, however, the researcher is confronted with questions which are easier. It also depends on which languages are affected by a particular problem. Naturally, if only one Baltic language shares a trait with the Balto-Finnic languages, and if, moreover, this is Latvian, the northernmost Baltic language, it is of course likely that a contact phenomenon is at hand. For example, Latvian has fixed stress on the first syllable (Holst 2001: 50), an innovation, and this can reasonably be attributed to Balto-Finnic influence because all Balto-Finnic languages have fixed stress on the first syllable as well (Laanest 1982: 90). This explanation for Latvian stress has indeed already been given (e.g. Haarmann 1976: 110, Stolz 1991: 33). A rule of thumb can be advanced: the younger a language contact phenomenon is, the easier it usually is to identify it.

Language contact between Baltic and Balto-Finnic can be observed on all levels of language structure, i.e. in phonetics, morphology, syntax and the lexicon (or which levels ever one wants to distinguish). Moreover, this language contact worked in both directions, i.e. there are phenomena in Baltic languages which exhibit influence from Balto-Finnic languages, and vice versa:

Baltic languages \Box Balto-Finnic languages

Some examples:

- ⇐: Stress on first syllable in Latvian (as discussed above), loss of gender in Tahmian (dialect of Latvian), loanwords in Latvian analyzed e.g. by Zeps (1962: 84–228).
- ⇒: Old loanwords present already in Proto-Balto-Finnic such as Finnish *hammas* 'tooth', *heinä* 'hay', *silta* 'bridge' (Laanest 1982: 321–327), verb prefixes in Livonian which stem from Latvian (Décsy 1965: 81).

There are also phenomena for which the direction of influence is unclear. This applies to some lexical items, for example. In addition to that, both Estonian and many varieties of Baltic have phonetic systems with three quantities (Holst 2001: 65f.), and research remains to be done on which languages had this trait first and which acquired it later, possibly by contact.

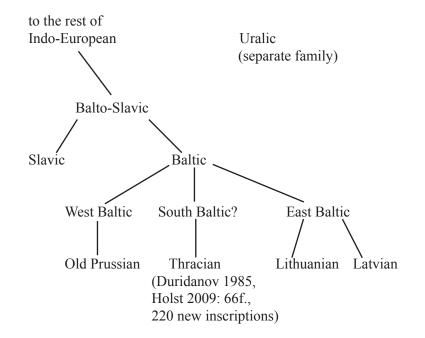
2. Mańczak's claim and a general reaction

With the preliminaries of section 1 in mind, it will now be possible to deal with Mańczak's hypothesis. It was first published in an article (Mańczak 1990), and the author later re-published this article, though not in its entirety, in a book which is a collection of articles (Mańczak 2008: 149-152). In the following I refer to the page numbers of Mańczak (2008). The hypothesis says that there is a Uralic substratum in Baltic; moreover, the Uralic substratum is claimed to be the reason for the split of Balto-Slavic into Baltic and Slavic. After having presented his evidence (which will be discussed in this paper in section 3), the author underlines his opinion again: "la différence entre Baltes et Slaves consiste en ce que les Slaves sont des descendants de cette partie de la population indo-européenne qui est restée dans l'habitat primitif, alors que les Baltes sont des descendants de cette partie de la population indo-européenne qui s'est superposée à un substrat finnois" (Mańczak 2008: 151). This statement, in my interpretation, clearly implies a substratum already in Proto-Baltic, and not in any later language, because the split of the Baltic and Slavic populations is attributed to the substratum.

If correct, Mańczak's hypothesis would be important news for Baltic linguistics, and beyond. Therefore the topic merits investigation, irrespectively of whether the result is positive or negative. The objective of this paper is to scrutinize the hypothesis.

There are good reasons to start such an investigation openminded. There are other branches of Indo-European which show effects of a substratum. For instance, Armenian has been influenced by languages from the Caucasus region, as several scholars have pointed out; for a recent survey see Holst (2009: 98–120). Insular Celtic has been influenced by languages from North Africa (Gensler 1993), a thesis which has its opponents, or even enemies, but which can be backed up quite well by structural evidence. The foreign influence may even extend to Germanic, e.g. in syntax (Holst 2010: 158f.). Also Tocharian has a substratum, as many experts agree (Krause 1955: 35–37, Thomas 1985: 147). In many of these cases, the substratum caused considerable changes in typological profile. Given that these Indo-European languages are affected, it is not impossible in principle that Baltic has a substratum, too. However, of course it depends on the data whether this is actually the case; the material needs to be investigated. As I intend to demonstrate later on, skepticism is justified in the Baltic case, and only extremely little good evidence can be put forward for this hypothesis.

In order to make my point, I would like to present a diagram first, consisting of a family tree of Baltic and some additions:



What will probably surprise readers here most is the term South Baltic and the Thracian language in this sub-branch. Although nothing hinges on this in this paper, this deserves a brief explanation. Thracian is a dead language which was spoken in the Balkans in antiquity, most of all in Bulgaria, and in Asia Minor; it is only imperfectly known. It has long been written that Thracian is reminiscent of Baltic or is close to Baltic (or similar wordings). It may be, however, that this is a too mild way of putting it. In face of the data on Thracian that have been published e.g. by Duridanov (1985), I recently expressed the view that Thracian possibly simply is a Baltic language (Holst 2009: 66), i.e. that it is another member of the Baltic branch of Indo-European. Consequently, the German term Südbaltisch was coined in order to classify Thracian (Holst 2009: 67), and this is translated into English as South Baltic here. In recent years, new excavations have been carried out in Bulgaria, and according to the media they have brought to light 220 new inscriptions said to be Thracian. I have not seen any of this material yet; the future will have to show how useful it is (general experience shows that often inscriptions are very short, and sometimes inscriptions are similar to each other, or even identical). It must be remarked, however, that it is still impossible to interpret some famous Thracian inscriptions. The whole matter needs more research in order to decide whether Thracian can indeed be taken up into the family tree of Baltic. In this paper I will only adduce data from West Baltic and from East Baltic.

There are two ways of reading a family tree. Firstly, it can be read in a "static way", i.e. as representing groupings and degrees of relatedness among languages. Secondly, it can be read from top to bottom as a diagram representing history; history starts with one language at the top which then splits up and diverges into more and more languages.

Now, the main problem with Mańczak's hypothesis, as I see it, has got to do with *time*. The hypothesis confounds Proto-Baltic and later Baltic languages. Most scholars would probably agree today that Balto-Finnic languages exerted influence on some later Baltic languages or dialects (especially in the north of the Baltic speech area), cf. section 1. However, Mańczak's claim can only be understood in such a way that *Proto-Baltic* was affected by the substratum, not a later language. This holds because only if interpreted in this way,

Balto-Finnic could be responsible for the split-off of Baltic away from Balto-Slavic. It will not work to present facts from some Baltic languages and then say that these are evidence for a Uralic substratum in Baltic *in general*. In order to make such an argumentation convincing, it would have to be demonstrated that the facts adduced are of Proto-Baltic age. In some issues this becomes difficult, and in others it is even clear that this is *not* the case. This main point of my criticism will become still clearer in the next section when the data are investigated. In addition, there are some further problems in Mańczak's argumentation and data; they will be addressed as well.

3. Mańczak's arguments in detail and a critical evaluation

Mańczak (2008: 149f.) presents ten arguments for his hypothesis. His discussions are very short; their length varies from one line (no. 4) to seven and a half lines (no. 1). For all of his arguments, Mańczak refers to other scholars and points out that they had already drawn a connection to Uralic. The order of the arguments is chronological; Mańczak begins with a reference to Meillet (1925) and ends with a reference to Thomason & Kaufman (1988). This is also the reason why no thematic ordering, e.g. according to lexicon, levels of grammar, etc., is present in the order.

As to the content of Mańczak's arguments, it must be remarked already here that he disregards an important fact: frequently the scholars he quotes do not assume a Uralic substratum in Proto-Baltic; often they only speak of later contacts, which of course existed and may be responsible for the observations in some cases. Occasionally, Mańczak does not reproduce correctly what the other scholars say. In the following, Mańczak's ten arguments are presented and investigations are carried out in order to evaluate them.

3.1. Gender

The neuter gender has been lost in Latvian and Lithuanian. A former system of three genders, masculine, feminine and neuter, was reduced to a two-gender system; usually the neuters joined the masculines. Meillet (1925: 100f.) comments on the loss of the neuter with the words: "Il y a ici une tendance spécifique, et il est permis de l'attribuer à des mélanges de populations de langue finnoise avec celles qui parlaient le letto-lituanien." (Lithuanian has some remnants of the neuter, e.g. in pronouns, but this is of lesser importance.) Mańczak (2008: 149f.) supports Meillet's opinion. However, there are three problems with this view.

Firstly, this innovation is found only in East Baltic. Old Prussian, in contrast, still has all three genders. Cf. cognates such as Lithuanian $\tilde{e}\tilde{z}er$ -as (m.), Latvian ezer-s (m.), Old Prussian assar-an (n.) 'lake', cf. Slavic: Polish jezior-o (n.) 'lake'. The differences between Old Prussian and East Baltic are great; much time must have elapsed in order to produce them. If an innovation is found only in East Baltic, this does not have anything to do with Proto-Baltic, but it is clearly a separate development at a later time. We have here our first example of how time is disregarded in Mańczak's hypothesis.

Secondly, if gender really were affected by a substratum, one would probably expect complete loss of it (not reduction), as in the Tahmian dialect of Latvian (cf. section 1). In fact, Armenian exhibits complete loss of gender, which matches Kartvelian and some other languages which are or were spoken in the vicinity of Armenian (Holst 2009: 102, 213, 220f.).

Thirdly, the development of the gender system which can be observed in East Baltic is also found in exactly the same way in other branches of Indo-European, as the following table shows:

Branch	Ancient language with m / f / n	Example languages with m / f
Celtic	Old Irish	Modern Irish, Welsh
Romance	Latin	French, Italian
Iranian	Avestan	Kurdish, Semnani
Indo-Aryan	Sanskrit	Hindi, Romani

In addition, in the Slavic branch the Sele Fara dialect of Slovene shows this development (Corbett 1991: 216, 317). The reason for the simplification lies in the fact that already in Proto-Indo-European masculine and neuter nouns were inflected in a similar way. This holds especially for the o-stems (a very frequent class): they only differed in the nominative singular, which had *-os with masculines and *-om with neuters, and in the nominative and accusative plural. It is natural that this system often underwent restructuring and loss of the neuter, and this happened independently in various branches of Indo-European. (Even details can be compared: in a similar way that Lithuanian has some remnants of the neuter in pronouns, Spanish and Portuguese have such remnants of the neuter in pronouns, too.) Due to the high number of parallels, the development of gender in East Baltic does not require an explanation with a substratum at all.

3.2. Local cases

Lithuanian has developed new local cases by univerbating postpositions with nouns. Meillet (1925: 101) comments: "la concordance avec le type finnois est frappante". This argument exhibits the time problem again, because the new cases are clearly young and do not have anything to do with Proto-Baltic. The development is typologically frequent and can also be observed in Indo-Aryan and in Tocharian, for example.

3.3. Evidentiality

Some Baltic and some Balto-Finnic languages have ways to express what is called *evidentiality* by typologists today. This term refers to events that the speaker only knows from hearsay and for the accuracy of which he does not vouch. Besides article treatments, Haarmann (1970) investigated this phenomenon within Eurasia in a short monograph, and recently a longer monograph has been devoted to it from a cross-linguistic perspective, not restricting itself to any particular area of the world: Aikhenvald (2004).

There are several ways to mark evidentiality in the Baltic and Balto-Finnic languages in question, and sometimes even several such

ways within one language. One means is that the verb has, alongside indicative, imperative, etc., another mood; this mood has several designations, a frequent one being *modus obliquus* (Laanest 1982: 239, Stolz 1991: 45–50, Holst 2001: 138), although some authors, such as Comrie (1981: 154), use *relative mood*, and *indirect mood* exists as well (Laakso 2001: 191, 193). Another means that is found in these languages to express evidentiality is the use of participles – without any accompanying finite auxiliary verbs. For example, Pisani (1959: 215) points to constructions such as Lith. *nešęs velnias akmenį* carry-PART devil-NOM.SG stone-ACC.SG 'the devil is said to have carried a stone' (the verb stands first in this example). These constructions are often used in fairy-tales for the reporting of an event. For details see Comrie (1981: 153f.), Stolz (1991: 45–50).

The expression of evidentiality is often recognized as an areal trait in the Baltic countries (i.e. including Estonia); this applies e.g. to Pisani (1959), Comrie (1981: 154), Stolz (1991: 45–50) and Holst (2001: 138). These sources do not indicate any particular direction of influence. Mańczak (2008: 150) claims that Pisani (1959) pleads for Balto-Finnic influence in such Baltic constructions as Lith. *nešęs velnias akmenį*. However, no such statement can be found in Pisani (1959). Pisani's brief article is written in a slightly awkward, but manageable German. Pisani (1959: 217) says, in reality, that there may have been a third language group which influenced both Balto-Finnic and Baltic in some structural traits, including the issue of evidentiality. Pisani (1959: 217) puts this idea into the context that Indo-Europeanist research of his time was becoming more open towards substratum questions, and he appreciates this development.

The whole issue of evidentiality in Baltic and Balto-Finnic will now be reinvestigated here. There are several questions that ought to be asked. First of all, considering that it has become clear from Aikhenvald (2004) that evidentiality is frequent on the earth, why then could its appearence in two language groups not be coincidental? Compare this with ergativity, for instance: investigations such as Dixon (1994) reveal that ergativity is frequent cross-linguistically; it does not necessarily point to a connection if two neighbouring language groups show this feature. If, however, the occurrence of evidentiality in the Baltic and Balto-Finnic languages should be no coincidence, further questions arise on the direction of the influence: was it from Balto-Finnic to Baltic, as Mańczak claims, or vice versa? Haarmann (1970: 63) points both to scholars who advocate one direction and to scholars who advocate the opposite direction. Or would it be wisest not to make any commitment on the direction? Laakso (2001: 193) maintains that: "it is difficult to prove any direct influence in either direction". This statement seems to leave all options open: a direction is not named, and the wording is also vague about whether there was any direct influence at all; if there was not, this would amount to the coincidence solution. In my opinion, the questions can be answered.

First, although it is true that evidentiality is typologically not uncommon, the details in this particular area in Europe do show evidence of a connection. It is not self-understood that participles are used to express evidentiality, but exactly this can be found both on the Baltic side and on the Balto-Finnic side. Moreover, a closer look at the modus obliguus in Latvian and in Estonian reveals that they derive from participles as well. The Latvian modus obliquus suffix -ot is "etymologically a participial ending, which is why it does not change for person or number" (Comrie 1981: 154). It can be traced back to *-ant-, which is reminiscent of Indo-European participles such as e.g. in Latin, by a regular phonetic development (via nasalization), cf. Holst (2001: 28). The Estonian modus obliquus suffix -vat is a participle as well, it represents a fossilized partitive case, as several scholars lay out (e.g. Haarmann 1970: 61, Laanest 1982: 239): -v, stem -va-, is the suffix of the participle, while -t is the suffix of the partitive in certain inflectional classes.

As to the direction of the influence, in my opinion the crucial observation is that within Balto-Finnic only Estonian and Livonian have evidentiality (Laanest 1982: 239, Laakso 2001: 191). These are only two out of around five to seven Balto-Finnic languages (the counting varies), and they are the two southernmost idioms. Moreover, the suffixes they use are not etymologically identical, as can be seen from Laanest (1982: 239). Therefore no suffix for evidentiality can be reconstructed for Proto-Balto-Finnic, and not even for a subgroup such as e.g. its southern branch. Consequently, no influence from Balto-Finnic on Proto-Baltic should be assumed. In Baltic, in contrast, the time-depth of the phenomenon seems to be greater, because Lithuanian and Latvian use etymologically identical participles, and Latvian's mood in *-ot* is derived from one of these participles as well. A natural question to ask is whether also Old Prussian could use participles for evidentiality; Endzelīns (1923: 757) states explicitly that this is unknown. My interpretation of all these facts is that the modus obliquus in Estonian and Livonian is a young feature, and it can be attributed to Baltic influence because in Baltic, despite the lack of Old Prussian data, the phenomenon is older. There then would be the opposite direction of influence to the one that Mańczak claims.

3.4. Numerals from 11 to 19

Lithuanian has numerals from 11 to 19 ending in *-lika*, and according to Mańczak (2008: 150) this can allegedly be compared to Balto-Finnic. According to Mańczak, the idea stems from Pisani (1959) again. But, as laid out in the previous investigation (of evidentiality), Pisani does not claim Balto-Finnic influence in Baltic for any features. Pisani (1959: 217) mentions the Lithuanian numerals in *-lika* only very briefly and merely maintains that they may be due to an unknown substratum.

There are indeed no particular reasons to believe that this substratum, if existent, is Uralic. The suffix in Balto-Finnic is Finnish -toista, Estonian -teist, and this is the partitive of Finnish toinen, Estonian teine 'other; second'; a word such as Finnish neljätoista 'fourteen', for instance, refers to the fact that in addition to ten there are four items of the second decade. Lithuanian -lika, however, stems from the verb *likti* 'to remain; to leave' < Proto-Indo-European **leik*^w-, **lik*^w- (ablaut variants) 'to leave'. The Lithuanian way to form these numerals can be compared much better to Germanic, which uses 'to leave' as well: the English numerals e-leven and twe-lve actually contain a remnant of leave. The connection has been remarked already, see e.g. Arumaa (1964: 25), who cites Gothic ainlif 'eleven', twalif 'twelve' and compares these forms to Lith. vienúolika 'eleven', dvýlika 'twelve'. Finally, attention must be drawn to the other Baltic languages. Latvian forms its numerals from 11 to 19 in an entirely different way: vien-padsmit 'eleven', literally 'one on ten', etc., see Holst (2001: 133); this is as in Slavic. Moreover, also Romanian and Albanian ON THE THEORY OF A URALIC SUBSTRATUM IN BALTIC

show this type, so that large parts of the Balkan "sprachbund", which also includes some Slavic languages, are typologically comparable with Latvian; see Solta (1980: 230), who also gives further references. From Old Prussian the numerals from 11 to 19 are unfortunately not known, as can be gathered from Eckert & Bukevičiūtė & Hinze (1994: 389f.).

3.5. Imperative

Lithuanian has an imperative suffix *-k*, and Balto-Finnic had an imperative suffix **-k*. Toporov & Trubačev (1962: 249f.) think that the Lithuanian suffix may stem from Balto-Finnic, and Mańczak (2008: 150) supports this idea.

It can be argued, however, that it is uncertain whether these suffixes are connected, and maybe this is even not particularly likely. As a rule, morphemes are more difficult to transmit from one language to another than single words, and for inflectional morphemes this seems to be more difficult than for derivational morphemes. It is especially unclear why an imperative morpheme should be taken over. Within Baltic, the suffix -k occurs only in Lithuanian. The morpheme is short (a single consonant), and therefore coincidence is possible.

3.6. Variation of voiced and voiceless consonants

Mańczak (2008: 150) draws attention to the fact that Kiparsky (1968: 90f.) has found about 50 doublets of Lithuanian words which exihibit variation of voiced and voiceless consonants (so-called b/p cases). An example, which Mańczak quotes following Kiparsky (1968: 90), is provided by Lith. *blekai / plekai* 'tripe'. In Latvian, Kiparsky (1968: 76–89) has found even more pairs of this type; they number about 300. The meaning in the doublets is identical or nearly identical.

Mańczak (2008: 150) claims that Kiparsky explains the doublets by "le fait qu'en finno-ougrien, primitivement, il n'y a eu que des consonnes sourdes." This statement probably refers to p. 96 of Kiparsky's article. However, this is too gross a simplification of what Kiparsky actually explains in his paper. Mańczak is silent about the fact that the Livonian language is involved in the process and that in fact Kiparsky (1968: 92–97) describes its role very well. Livonian originally had no voiced plosives, which is an inherited feature. Therefore, speakers of Livonian replaced voiced plosives by voiceless ones when taking up Baltic words, and the resulting forms could drift back into Latvian (and, less often, into Lithuanian). This process made doublets arise (Kiparsky 1968: 95f.). Moreover, due to Livonian influence, also hypercorrect forms with voiced plosives arose where voice-less plosives would be etymologically correct (Kiparsky 1968: 96).

This means that Mańczak's argumentation implies a problem with time again: relatively recent events involving language contact are treated as if they were older. The role of Livonian is disregarded.

Besides Baltic, the Pskov-Novgorod dialect of Russian exhibits so-called b/p cases, too. Recently, Čekmonas (2001: 351–354) has explained this as a contact phenomenon with Balto-Finnic as well.

3.7. Use of genitive instead of adjective

Mańczak (2008: 150) draws attention to the fact that a genitive, instead of an adjective, is used in language designations such as Lith. *lietuvių kalba* the 'Lithuanian language', literally 'the language of the Lithuanians'. He maintains that this is due to Finnish influence. This argument looks more interesting than the others he adduces.

In fact, Latvian has parallel formations: *latviešu valoda* 'the Latvian language'. The constructions can be compared to Finnish *suomen kieli* 'the Finnish language' and Estonian *eesti keel* 'the Estonian language'. There is a principal difference to *the English language, die deutsche Sprache, la langue française*, etc., which use adjectives. It must be noted, however, that the Baltic languages use a genitive plural, because they refer to the people speaking the language, whereas the Balto-Finnic languages use a genitive singular, since they refer to the country where the language is spoken. If Finnish and Estonian really had constructions entirely parallel to Baltic, these would be *suomalaisten kieli* and *eestlaste keel* – this may be grammatically possible, but it is entirely unidiomatic. Possibly, the plural / singular difference is not a sufficient reason for giving up the idea of a connection. However, notice also that the direction of the influence, if it exists, is not clear.

3.8. The word for 'amber'

The Baltic word for 'amber', OPr. *gentars*, Lith. *giñtaras*, Latv. *dzintars*, is claimed to be a loanword from a Uralic source by Bednarczuk (1976: 47f.). However, a single word can probably not serve as good evidence for a substratum. Moreover, the matter of course depends on whether the etymology is correct, and on which language had the lexical item first. In this particular case, it would remain unclear which Balto-Finnic language could be the source; these languages have entirely different words for 'amber' (e.g. Finnish *meripihka*).

3.9. Hydronyms

Zinkevičius (1984: 155) presents a map on which about 30 hydronyms in Lithuania are possibly of Balto-Finnic origin, and hundreds of such hydronyms are found in Latvia. According to Mańczak (2008: 150) these facts can be used to further substantiate his hypothesis.

This argumentation is problematic, though. There is no Slavic substratum in German either, although there are many place names of Slavic origin in Germany. The Balto-Finnic hydronyms witness events of much later times, of course, when Baltic, especially Latvian, expanded and Livonian receded. The place names of foreign origin are usually only found in certain parts of the Baltic speech area, and other parts are free of them because Baltic settlement is older there. In the same way, the place names of Slavic origin in Germany are only found in eastern parts of that country, as could be expected. Moreover, not all of Zinkevičius' etymological claims are correct, as has long been shown by other research on these hydronyms (Santeri Junttila, personal communication).

3.10. 3rd person verb forms

The 3rd person verb forms in the Baltic languages are indifferent for number. Thomason & Kaufman (1988: 243) claim that this is due to Balto-Finnic influence, and Mańczak (2008: 150) refers to them approvingly. However, as I intend to show, this hypothesis is flawed. After that, I will come up with an alternative theory which accounts for

the Baltic facts and which locates the foundation for the phenomenon in a syntactic feature of Proto-Indo-European.

The Baltic facts are well-known. The 3rd person verb forms do indeed not show any variation in number, cf. Latvian berns ed 'the child eats', bērni ēd 'the children eat'. This applies even to the most irregular verbs, e.g. 'to be'. All tenses, aspects and moods exhibit an identity in number in the 3rd person. If a Baltic idiom has a dual, the 3rd person dual is the same again as the singular form and the plural form. The syncretism can be observed in Latvian, Lithuanian and Old Prussian; there is therefore no problem with time depth this time, and the trait must be reconstructed for Proto-Baltic. In fact, Stang (1966: 2) adduces this feature as his first point when he lists the characteristics of the Baltic branch. As the comparison with other branches of Indo-European shows, historically the Baltic verb forms in question are singular forms (Stang 1966: 2, 411). The diachronic change was that a singular form was expanded to cover also dual and plural functions. The question that arises for historical linguistics is why the 3rd person singular verb form was generalized. Erhart (1987) does not give a clear solution to the problem. Stang (1966: 411) calls the issue "ein schwieriges Problem".

In order to back up their hypothesis of Uralic influence, Thomason & Kaufman (1988: 243) quote Comrie (1981: 125), who reports that in some Uralic languages 3rd person singular and plural are identical. However, it will not do to draw attention to *any* Uralic languages in which this may be so; Uralic is a large family represented in many places. The substratum theory for Baltic would have to operate with Balto-Finnic (or a close precursor) because this is the language group which is actually geographically contiguous with Baltic and because the other arguments in the theory referred to Balto-Finnic as well. In Balto-Finnic, there is clearly a distinction in number in the 3rd person, cf. these forms from the verb 'to sing':

	Finnish	Estonian
sg.	laula-a	laula-b
pl.	laula-vat	laula-vad

In colloquial Finnish, constructions such as *ihmiset laulaa* (instead of *laulavat*) 'the people are singing' can be heard today, but this is certainly a young phenomenon. Moreover, Estonian has *on* 'is, are' in both numbers. But this, too, is clearly young because Estonian is the only Balto-Finnic language which behaves in this way; the forms for 'to be' in all Balto-Finnic idioms can be gathered from the paradigms in Laanest (1982: 250–271). The methodical point in the two cases is to look at all languages of the branch, and this reveals no deep age for the two phenomena. On the contrary, the above small table reveals that already in Proto-Balto-Finnic there was a form for the 3rd person plural which ended in *-*vat*. As many researchers point out (e.g. Comrie 1981: 125, Laanest 1982: 231), this is historically the plural of the present participle. Balto-Finnic can hardly be the source for the Baltic development. Its origins probably lie elsewhere.

I will now present my own solution to the Baltic problem. In Ancient Greek, there is a rule in syntax implying a deviation of agreement which looks peculiar at first sight. If the subject of a clause is a neuter noun in the plural, the verb form is in the singular: $\tau \dot{\alpha} \, \ddot{\alpha} \sigma \tau \rho \alpha$ $\lambda \dot{\alpha} \mu \pi \epsilon \iota$ 'the stars are shining' (Stock 1984: 88). Masculine and feminine nouns, in contrast, take the verb in the plural. Now Szemerényi (1990: 197, 1996: 186) makes the important observation that this rule is not confined to this language, but it applies to many older Indo-European languages; he names Attic Greek, Old Indian, Gatha Avestan, Hittite and possibly the earliest Brythonic Celtic. The reason is, as Szemerényi remarks, that the plural of the neuters originally was not a plural, but a different number: a collective. The number system of Indo-European is often described as containing singular, dual and plural in synchronic accounts, but there are clear hints of this earlier collective. (Another hint is, for instance, that in Latin some nouns in -us can take two plurals, in $-\overline{i}$ and in -a, with different shades of meaning, and Greek shows the same phenomenon.) Collectives appearing with singular verb forms can also be observed in non-Indo-European languages, e.g. Burushaski (Tiffou & Pesot 1989: 50, note 2). The decisive point for our purposes is that, due to its presence in many old key languages of Indo-European, the syntactic feature under study can be reconstructed for the Indo-European proto-language. It is useful to become aware of the entire system of syntactic rules about which number the verb form took on. This system can be represented in the following table:

Number of the noun	sg.	pl.
Gender		
of the noun		
m.	sg.	pl.
f.	sg.	pl.
n.	sg.	sg.

Some languages - see Szemerényi's listing above - preserved this state of affairs. Other languages simplified the system. There is a simple way to do this: neuters adapt to masculine and feminine nouns and demand plural verb forms as well. The result is that the number of the subject and the number of the verb always agree. Gender plays no role any longer in the assignment of number. This new system is present e.g. in Latin, the oldest Germanic languages and Slavic. Attention must now be drawn to the fact that the change just laid out is not the only option to dissolve the proto-system. A simplification can also be achieved if the singular verb forms which the neuters require are regarded as the new norm, and singular verb forms are introduced also for masculine and feminine nouns. This is the opposite way of abolishing the inequality which the genders cause. The result is that singular verb forms are used for all three genders and for both numbers. 3rd person plural verb forms, therefore, may disappear entirely from the language because no subjects demand them any longer. This is exactly the development that I assume for Baltic.

If this theory is correct, no influence from Uralic needs to be assumed. On the contrary, it may even be possible that the fact that Estonian *on* is used in both numbers, mentioned above, is due to influence from Baltic.

4. Conclusions

Mańczak's theory presupposes a Uralic substratum in Proto-Baltic. One would need to be slightly less skeptical if he claimed a substratum in Proto-East-Baltic, though it would probably still not be recommendable to become an adherent of such an idea. What is more realistic is to assume Uralic, to be more exact: Balto-Finnic, influence in Latvian alone. This opinion is voiced by Comrie (1981: 147): "to a large extent, present-day Latvians can be viewed as linguistically assimilated Balto-Finnic speakers". The statement can even be correlated to historical facts because it is known that the speech area of Livonian was once considerably greater and then shrank due to the expansion of Latvian. But these are matters quite different from the ones that Mańczak claims.

Summing up, Mańczak's hypothesis is not convincing. One could argue now that this does not necessarily mean that it has to be given up for all time, since new arguments may appear in the future. In fact, such new arguments would definitely be needed; the question is, however, whether they can be found. Perhaps it is simply not possible to back up this claim.

It is perfectly possible that the split between Baltic and Slavic does not have anything to do with Uralic at all, and it is conceivable that Baltic was already a language of its own when it came into contact with Uralic. It is also possible that Proto-Baltic was not in contact with a Uralic language yet, but only later Baltic languages or dialects were so. The future will have to show whether new developments make it advisable to take up the discussion of this issue again, but at present there are no reasons to do so.

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Tiivistelmä

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Artikkeli käsittelee balttilaisen kantakielen eli kantabaltin mahdollista uralilaista, tarkemmin ottaen itämerensuomalaista substraattia. Tällaista teoriaa on esittänyt Witold Mańczak (Mańczak 1990, 2008). Tarkempi perehtyminen Mańczakin väitteisiin ja niitä tukeviin argumentteihin osoittaa ne kuitenkin heikosti perustelluiksi.

Kopsavilkums

Jan Henrik Holst

Raksta tēma ir baltu pirmvalodas iespējamais urāliešu valodu, jeb precīzāk – Baltijas jūras somugru valodu, substrāts. Šādu teoriju ir piedāvājis Vitolds Mančaks (Witold Mańczak, 1990, 2008). Plašāk iedziļinoties Mančaka izteikumos un tos balstošajos argumentos, tomēr atklājas, ka tie ir vāji pamatoti.

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Lithuanian partitive genitive and Finnish partitive in existential sentences

1. Introduction

There exists a fairly large literature concerning the similarities found between Finnic and Baltic, especially those in the Lithuanian language. In this article, my intention is to chart the Finnic/Baltic correspondences in the use of the partitive (F) and genitive partitive (B). Lithuanian and Finnish, as the presumed archaic representatives of the Baltic linguistic continuum, provide the best points of comparison. As is noted in several typological studies (Matthiassen 1995; Larsson 2001; Klaas 1996), the correspondences of the Lithuanian partitive genitive and Finnish partitive cover a wide semantic-syntactic area, namely:

- I Subjects and objects:
- a) subjects of existential sentences with negation;
- b) subjects of existential sentences without negation;
- c) as objects of negated transitive verbs;
- d) as objects of transitive verbs designating an indefinite quantity of objects or mass;
- e) as objects of certain aterminative verbs.

- II NPS, ADJPS, ADVPS designating quantification show Lit genitive, Fi partitive:
- truputėlis druskos [bit salt-GEN] hiukkanen suolaa [bit salt-PART], kilogramas sviesto [kilogram butter-GEN] kilo voita [kilogram butter-PART], maišas miltų [sack flour-PL.GEN] säkki jauhoja [sack flour-PART.PL], minia žmonių [throng people-PL.GEN] joukko ihmisiä [group people-PL.PART];
- with numerals, Lit 10–20, 30, etc. + PL.GEN Fi 2, 3, 4, etc.+ PART.SG; *de*šimt įsakymų [ten commandment-PL.GEN] – *kymmenen käskyä* [ten commandment-PART.SG];
- with indefinite pronouns: *kažkas pikto* [something bad-GEN] *jotakin pahaa* [something-PART bad-PART];
- with certain adjectives and adverbs expressing quantification: *pilnas* 'full' + GEN – *täysi* 'full' + PART, čia *daugiau vietos* [here more space-GEN] – *tässä on enemmän tilaa* [here is more space-PART].
- **III** For predicatives in certain semantic functions, the genitive is used in Lithuanian, while in Finnish the partitive is used.

Despite the similarities, the Lithuanian textual usage of the partitive genitive in the subject and object in groups Ib and Id differs from that of the partitive in Finnish. Although the definition of the partitive (partitive-genitive) in these functions refers in both languages to an indefinite quantity of objects or mass, while that of the nominative or accusative indicates definiteness (or concreteness, totality), the use of the partitive in Finnish seems to be much wider. In this article I shall present examples of such usage taken from translations of Finnish fiction (see Ch. 4), and try to determine the motivations for the choice between subject genitives and nominatives in Lithuanian, as compared to Finnish partitives, in existential sentences.

2. Finnish: Subject case alternation: nominative / partitive in existential sentences

The research on existential sentences in Finnish has a long tradition. As a result, the properties of such sentences have been described thoroughly, and despite new approaches, the basic characterization remains the same.

Existential sentences are formed with intransitive verbs. Their prototypical structure is as follows (ISK 2004: 873–876; Huumo 1997: 96):

- there is no verb agreement (the predicate is always 3sG);
- the primary NP (= subject) has a post-verbal position in the clause (LOC + V + NP-PART/NOM);
- the primary NP (= subject) is partitive when the clause is negated. In affirmatives, the partitive is limited to mass noun or plural subjects.
- (1) *Piha-lla juokse-e laps-i-a.* yard-ADE run-PRS.3SG child-PL.PART 'There are children running in the yard.'

(2a) Jääkaapi-ssaonvoi-ta.fridge-INEisbutter-SG.PART'There is butter in the fridge.''

The partitive case is thus an essential property of existential sentences, though it has other functions as well. Diachronically, it is based on a separative case ("out-of"), and, according to Lauri Hakulinen, except for a few lexicalized adverbials, e.g., *alta* 'from below', *kotoa* 'from home', developed a central meaning of partial object and subject (Hakulinen 1979: 101). The latter function is fairly late. Originally it may have represented an adverbial-like element, e.g., *väkeä tulee* [people-SG.PART come-PRS.3SG] 'people come' might have been *väestä päin tulee* [people-SG.SEPARATIVE from come-PRS.3SG] 'from-the-direction of people come' (ibid. 562).

2.1. Semantics and pragmatics

The basic property of the modern Finnish case alternation is to signify quantification. *Bounding – non-bounding* as a cover term was introduced fairly recently, especially when referring to aspectual object case alternation (in English, see e.g., articles by Paul Kiparsky 1998, Tuomas Huumo 2003). Partitive subjects are used for divisibles/non-countables, i.e., plural referents and mass nouns (substances, including abstracts). The traditional definitions oppose the partitive to nominative: while the latter indicates an exhaustive, or total quantity, the former allows a surplus; it refers to a quantitatively non-delimited entity (see Wähämäki 1984: 24–31ff. and Huumo 2003 for the research history and terminology).

Indefinite quantity is the basic meaning of the partitive subjects. When divisible nouns are marked for partial quantity, the referents themselves are referentially indefinite, even though the set they belong to may be known.

(3) *Tämä-n kirja-n os-i-a on varasto-ssa*. This-GEN book-GEN part-PL.PART is store-INE 'Parts of this book are in store.' (Chesterman 1991: 145–146; ISK 2004)

Partitives seem indeed to have an independent meaning, which is shown by their occasional extension into the sphere of transitive sentences:

(4)	Ihmisiä	seurasi	pahoinpitely-ä
	people-PL.PART	followed-3sg	assault-PART
	toisella	puolen	katua.
	other-ALL	side-GEN	street-PART
	'People were watch	ning the assault or	the other side of the street.'
	(heard on the radio 18.	6.2012)	

In my intuition, a nominative subject would be required because of the transitive verb and the partitive object. Among other Finnic languages, in Vepsian partitive subjects of transitive verbs are reported to be common, or, as Aimo Hakanen put it, the idea of an indefinite amount is taken to its logical end. Since Finnish has not quite come to that yet, the partitive could, in his opinion, merely mark an existential sentence (Hakanen 1973: 67).

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2.2. Word order variation

The order of sentential constituents in Finnish is arranged to serve the needs of the discourse, and the subject may be sentence-initial:

(2b) *Voita* on jääkaapissa. 'Butter is in the fridge.'

Here, 'butter' is foregrounded as an answer to a possible topic 'the ingredients you need for a cake'. Finnish is a Topic-oriented language: in phonologically unmarked sentences, the initial position is reserved for nominals. When there is no locative (place, time) in the sentence, the partitive NP takes its place:

(5)	Lintu-j-a	lens-i	edestakaisin.
	Bird-PL.PART	flew-3sg	back-and-forth
	'There were birds	flying back and	forth.'

As a rule, partitive subjects establish new discourse referents. According to Börje Wähämäki, existential sentences are presentative constructions (Wähämäki 1984: 39). Marja-Liisa Helasvuo, however, finds that in addition to "newness", the partitive NPs of existential sentences function like predicatives in that they are generally not mentioned in the subsequent discourse, and they characterize the location to which they are attached. Helasvuo's corpus covered only the structures LOC-NP + COPULA + NP, nearly half of which were habitives, i.e. possessive structures "NP-ADE COP NP-NOM/PART" – 'NP has NP' (Helasvuo 1996: 344-352). It is to be expected that a human being possessing something is the center of a discourse, and Wähämäki's claim probably still stands for other locatives.

A special sentence type VP + NP signifies the appearance of a phenomenon. For example, *Ilmeni ongelma/ongelmia* [appeared-3SG problem-NOM/PL.PART] ('A problem appeared/Problems appeared') needs no topic, being almost a set phrase, implicitly placed in a certain concrete context (ISK 2004: 855–856).

2.3. Existential verbs

Research on verbs that can co-occur with partitive subjects has continued for decades (see Wähämäki 1984), and has shown that, in addition to *olla (olemassa)* 'to be, exist', there are hundreds of lexical intransitives with "bleached" meaning. They indicate:

- a) existence, emergence, cessation of existence (event or action), sensory concretion, movement and gathering, verbs of existentially relevant change;
- b) "public" events or states, located in a place directly, desemanticized, typical actions indicating existence; e.g.:
- (6) *Metsä-ssä hyppel-i orav-i-a*. Forest-INE jumped.3SG squirrel-PL.PART 'Squirrels were jumping in the wood.'

The typical behaviour of the squirrels, jumping around, is a sign of their existence, whereas thinking cannot really be located at any place. Private activities and states are thus excluded:

(6a) *Yliopisto-ssa ajattele-e tutkijo-i-ta. University-INE thinks researcher-PL.PART
'In a university, researchers are thinking.' (Wähämäki 1984: 346-369)

2.4. Negation

The partitive plural is obligatory in existential sentences with negation. The partitive singular that has its affirmative counterpart marked with the nominative singular can only be used with the most prototypical existential verbs ('be/exist', 'dwell/live', 'be visible', appear', 'come', disappear', etc.). Examples (Huumo 1999: 41):

(7a)	Ice-ADE	<i>oli</i> was a wolf on the id	<i>susi.</i> wolf-NOM ce.'	
	<i>Jäällä</i> ice-ADE 'There was	<i>ei</i> NOM.3SG no wolf on the	<i>ollut</i> be-PST.PTCP.SG ice.'	<i>sutta</i> . wolf-part
(7b)	<i>Jäällä</i> Ice-ADE 'There was	<i>ulvoi</i> howled a wolf howling	<i>susi.</i> wolf-NOM on the ice.'	
	* <i>Jäällä</i> ice-ADE 'There was	<i>ei</i> NOM.3SG no wolf howlin	howl-PST.PTCP.SG	<i>sutta</i> . wolf-part
Cf.,	however, con	rresponding ser	ntences with the pa	rtitive plural:
(7c)	<i>Jäällä</i> Ice-ADE	<i>ulvoi</i> howled	<i>susia</i> . wolf-pl.part	

'There were wolves howling on the ice.'

Jäällä	ei	ulvonut	susia.
ice-ADE	NOM.3SG	howl-PST.PTCP.SG	wolf-PL.PART
'There were no wolves howling on the ice.'			

There are further factors facilitating the choice of the partitive with singular subjects (ISK 2004: 876).

When the form is syntactically obligatory, there is no need to imagine a part of some referent. Besides, denying the existence of any part also denies the whole.

A special problem concerns inherently definite NPs with partitives. These are cases like:

(8a)	Täällä	ei	ole	Anna-a.
	Here	NOM-3SG	be-CON.PRS.SG	Anna-PART
	'There is no A	Anna here.'		

Vs. (8b) Anna	ei ole täällä.
'Anna-NOM	is not here.'

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In 8, the existence of a referent is not denied, but it refuses to establish and identify a referent of that identity in the location to which refers (Wähämäki 1984: 287). While the usage in (8) is to some speakers unacceptable – unless it means that Anna does not exist any more – it becomes immediately normal when a lexical verb, e.g., *näkyä* 'to be seen', is used.

3. Lithuanian: Subject case alternation: partitive genitive / nominative in existential sentences

In the literature available to me there are only three pieces of research dedicated to existential sentences in Lithuanian. One is based on an English-Lithuanian corpus (Kalėdaitė 2006). The starting point is constructions with "there is...", with the corresponding structures in Lithuanian:

a) Absolute existence:

Buvo	trys	broliai.	
be-PST.3S	G three	brother-PL.NOM	= verb _{exist} SUBJNP (XP)
'There w	vere/lived	three brothers.'	exist

b) Locative existence:

Plaukuose	baltavo	žilos	sruogos,
Hairs-LOC	be-white-PST.3SG	grey-PL.NOM	wisp-PL.NOM
		= v	erb _{exist} SUBJNP LOCP
'There were	streaks of white in	her hair;…'	
(Kalėdaitė 200	6: 119, 124)		

In 93.7% of analyzed examples, the locative element was in the initial position (ibid. 122). Although genitive plural partitives appear in the examples, they are not discussed in the article (...*iš tiesų yra vaiduoklių*... [in-truth is ghost-PL.GEN] 'There are really ghosts / ghosts exist'; (ibid. 120).

For the second article, see Ch. 3.3. on word order, for the third article, see Ch. 3.4. on negation.

3.1. Partitive genitive

The partitive genitive has its roots in older stages of Indo-European languages. In the absence of a special treatment dedicated to its use in existential sentences, I shall resort to the definitions in Lithuanian grammars and handbooks. The partitive genitive (Senn 1966), or genitive of indefinite quantity (Ambrazas 1997), *dalies kilmininkas* (Šukys 1998), in addition to being an object case:

- is used with existential verbs, e.g. intransitive and reflexive verbs with itr. meaning, and some impersonal verbs;
- expresses an indefinite amount of mass or number of concrete things or animate beings, or an abstract concept.

Jonas Šukys presents the "minimal pair" with the subject in nominative and genitive: *ateina svečiai* [guest-NOM.PL] – *ateina svečių* [guest-PL.GEN] = the guests come – (some) guests come, i.e. a group of people, whose quantity is unimportant, or only part of those invited came (Šukys 1998: 100).

Ernest Fraenkel describes the partitive genitive in existential sentences as designating "unbestimmte, teilbare Masse" – and for nominative subjects and accusative objects, the characterization is: "mehr das Ding als solches, besonders wenn etwas Bestimmtes in Augenschein genommen wird" (Fraenkel 1928: 46).

3.2. verbs with partitive genitive subjects

The sources (Ambrazas & al. 2006) give the following verb groups with which the partitive genitive subjects may or must be used:

- a) existence, location: *būti* 'be', *gyventi* 'live', *baltuoti* 'show white', *juoduoti* 'show black', *pasitaikyti* 'happen', *likti* 'remain'...;
- b) change, emergence: *rastis* 'be found', *atsirasti* 'be found, emerge', *pasirodyti* 'appear', *dygti* 'grow', *augti* 'grow'...;

- c) locomotion: bėgti 'run', eiti 'go', važiuoti 'travel'... With prefixes: pra- ('to V stg to a small extent'), pri- ('to V stg to a great extent'). With the prefix pri-, only the genitive is possible: atėjo svečiai (NOM) / svečių (GEN), but priėjo svečių (GEN).
- d) change in quantity: *daugėti* 'increase', *mažėti* 'decrease' (with these, nominative is possible), *stigti, (pri)trūkti* 'not be enough', *(už)tekti, pakakti* 'suffise' (obligatory complement). Sometimes the genitive in this group is understood as an object (Ambrazas 2006: 225).

In groups a) and b), the Lithuanian genitive usage corresponds fully to that of the Finnish partitive. In c) the verbs have existential uses as well. In Finnish there are no prefixes, and the partitive alone cannot express a small or great amount. In group d), the Finnish quantifying verbs *lisääntyä* 'increase', *vähentyä* 'decrease', require a nominative: for the example *padaugėjo žmonių* = '[the number of people] *people increased*', the partitive would be to my mind questionable: *Ihmisiä* [PL.PART] (?) *lisääntyi*. Nominative plural with congruent predicate verb is normal: *Ihmiset lisääntyivät*. With the rest of the verbs in this group, both nominative and partitive are acceptable.

3.3. Word order variation

According to A. Holvoet (2005), various word order permutations are possible in Lithuanian. Thus LOC + V + GEN-SUBJ may have variant orders:

(9)	<i>Dėžutėje</i>	<i>yra</i>	<i>saldainių</i> –
	Box-LOC	is	chocolate-pl.gen
	<i>Saldainių</i>	<i>yra</i>	<i>dėžutėje</i>
	chocolate-PL.GEN	is	box-LOC
	<i>Saldainių</i>	<i>yra</i>	<i>dėžutėje.</i>
	Chocolate-PL.PART	is	box-LOC
	'There are chocola	tes in the bo	x.'

<i>Rasiassa</i>	on	<i>konvehteja</i> –
Box-ine	is	chocolate-PL.PART
<i>Konvehteja</i>	<i>rasiassa</i>	on –
chocolate-PL.PART	box-INE	is
<i>Konvehteja</i>	<i>on</i>	<i>rasiassa.</i>
Chocolate-PL.PART	is	box-INE
'In the box, there a	ire chocolates	s.'

The verb-initial variant is not mentioned, but presumably it is just as possible as in Finnish, or even more so, since verb-initial sentences are not a rarity in Lithuanian: *Užeina žmonių* [people-PL.GEN]⁽(some) people drop in' (Ambrazas 1997: 655) = Finnish: *Ihmisiä* [people-PL. PART] *tulee käymään*. The verb-initial variant *?Tulee käymään ihmisiä* requires at least with this verb a highly specific context.

3.4. Negation

In Lithuanian, genitive subjects are used with negated existential verbs, and especially with $b\bar{u}ti$ 'to be' (Berg-Olsen 1999: 82). The oldest grammars state that sentences with the negative particle *ne* "mostly get the genitive" (Ambrazas 2006: 233–232), while Alfred Senn claims that the subject of negated existential and other comparable sentences is always in the genitive, e.g., $ne + b\bar{u}ti$ in the sense "nicht da sein, nicht vorhanden sein, nicht existieren". Some reflexive verbs with an intransitive meaning also co-occur with genitive (*nebevire nieko* [NOMmore-cooked nothing-GEN] 'nichts kochte mehr') (Senn 1966: 394).

However, nominative subjects are found as well, as is exemplified in an article by Loreta Semeniene (2005; see also the statistics of word order and case in intransitive sentences therein): (10) Dailininkas palaidotas Rasų kapinėse, bet

kapas	neišliko,
[grave-NOM	NOM-remain-PST.3SG]

nors vieta, kurioje buvo laidojami mokslininkai, žymūs dailininkai, visuomenės veikėjai, žinoma.

'The artist is buried in the Rasos cemetery, but the grave has not remained, although the place where scientists, notable artists, public figures are buried is known.'

- (11) Mirė poetas ir švietėjas 1897 m. Varšuvoje, kur tuo metu gydėsi.
 - Jo kapo neišliko [grave-GEN NOM-remain-PST.3SG].

'The poet and educator died in 1897 in Warsaw, where he was undergoing medical treatment. His grave has not remained.' (Semeniene 2005: 68)

Petr-one-buvokoncert-e.Peter-GENNEG-be.PST.3SGconcert-LOC'Peter was not at the concert.''Peter was not at the concert.'

A. Holvoet (2005: 143–45) discusses the genitive of proper nouns in negated sentences, and appeals to a "perspectival center" that lies on the location, not on the subject. This idea, spread from research on Russian negated existentials, is exactly the same as suggested for the Finnish examples (8a–8b) above.

As a preliminary conclusion, existential sentences with partitive subjects in Finnish, and partitive genitive subjects in Lithuanian, are characterized by referents that have not been identified in the context, represent new information (sentence-final position), and are non-identifiable to the hearer (Semeniene 2005 for Lithuanian). Negated existential sentences differ on some points and would require a separate study.

4. Translations of Finnish partitive subjects into Lithuanian

Four novels translated from Finnish into Lithuanian were examined for the structures in question - three by Arto Paasilinna, namely Jäniksen vuosi (= AP JV, Lithuanian ZM, English YH), Suloinen myrkyttäjätär (= AP SM, Lithuanian GNV), Hurmaava joukkoitsemurha (= AP HJ, Lithuanian GSM), and Puhdistus by Sofi Oksanen (= SO P, Lithuanian V, English P). Translations from Finnish might reveal the motivations of the Lithuanian usage, as full structural congruence will probably highlight the factors influencing the Finnish partitive choice as well (e.g., sentence-final position). Choice of the nominative in Lithuanian should, in turn, reveal the factors that limit the use of the partitive genitive. Otherwise we would have to content ourselves with statements like "the choice is optional", or "intuitions are being lost". Naturally, the model provided by Finnish may have strengthened the decisions of the translators to choose the genitive partitive, due to the presence of a partitive in the model. Changes in syntactic structures occurred as well, though not very often.

Besides negated sentences, sentences containing quantifiers or verbs always requiring the genitive partitive, were left out, as they would presumably bring nothing new to light. Constructions with impersonal participle predicates of transitive verbs also were not counted, though grammars describe them as having partitive genitive subjects. The Finnish habitive construction, which is very frequent, had to be left out, because the Lithuanian correspondence is a transitive verb *turėti* 'to have'. Genitives appearing with impersonal intransitive predicates were left out as well, although they often showed full formal congruence with Finnish partitives, for instance:

(13)	Miten	oli	mahdolli	ista, että
	how	was	possible	that
	tällaisia	ihmisiä	oli	olemassakaan?
	such-PL.PART	people-PL.PAR	T was	in-existence-too (AP JV 165)

Nejau	esama			
PTC	be-PASS.PTCP.PRS.NEUTR			
šitokių	žmonių!			
such-PL.GEN	people-PL.GEN (AP ZM 120)			
'How could such men exist?' (AP YH 118)				

In grammars, the genitive in such constructions is called the agentive genitive (Ambrazas 1997: 662).

The resulting list of 197 sentence pairs were presented to a native speaker, some of them to two speakers, both language professionals, who were asked why in certain cases the partitive genitive could not be used. It was immediately obvious that Lithuanian resorts to partitive genitive much less than Finnish to partitive subjects. While full correspondence was found in 65 sentence pairs, that is, Finnish partitive plural was translated as Lithuanian genitive plural, there were 132 non-corresponding pairs where Finnish partitive plural was translated as Lithuanian nominative plural.

4.1. Examples of bare genitive subjects in affirmative sentences

Jonas Šukys states that the genitive is often used when the entity is mentioned for the first time. Further, it is used when the indefiniteness of the amount is stressed. Often the genitive is possible but the speakers neglect to use it. On the other hand, shaky intuitions cause inappropriate usage, as in: *Šalį užplūdo *priešų* [country-ACC flood-ed-SG3 enemy-PL.GEN / *priešai* PL.NOM] 'Enemies flooded the country' (Šukys 1998: 101–106). On the other hand, William Schmalstieg claims that both cases are applicable in, e.g., *užplūdo pirkėjai* [flooded shopper-PL.NOM / *pirkėjų* PL.GEN] 'shoppers came in droves' (Schmalstieg 1988: 171). The absence of further context leaves this matter unresolved.

4.2. The congruent group

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There were 65 sentences with full correspondence: Finnish PART – Lithuanian PART.GEN. Sentence-final subjects predominate in Lithuanian: LOC VS – 40, VS – 14, SV – 6. The Finnish sentences have partitive subjects in the same positions, except in one case where the order is the opposite.

Examples (partitives and partitive genitives in bold, non-partitive corresponding NPs underlined):

(14a) *Metsässä vilisi monenlaisia eläimiä:* [forest-INE teemed various-PL.PART animal-PL.PART, *oravia, jäniksiä*, squirrel-PL.PART, hare-PL.PART]

maalinnut rymistivät lentoon ja laskeutuivat taas maahan, metsoja piti ajaa kuin kanoja laitumella, että ne olisivat ymmärtäneet lähteä oikeaan suuntaan. (AP JV 56)

(14b) <i>Po</i>	mišką	šmėžavo	visokiausių
[PREP	forest	teemed	various-PL.GEN
gyvių,	voverių,	ZU	likių,
animal-PL.GEN	N, squirrel-F	PL.GEN, ha	are-PL.GEN]

tarškėdami kilo ir vėl leidosi sausumos paukščiai, kurtinius it vištas teko ginti reikiama kryptimi. (AP ZM 42)

'The forest was teeming with various animals: there were squirrels and hares; land fowl clacked into flight and splayed to earth again: he chased capercaillies like farmyard fowl to get them to understand which way to go.' (AP YH 45)

(15a) Järki sanoi Vataselle, ettei karhu käy ihmisen kimppuun,

muttajoskustapahtuujärjenvastaistakin.[butsometimeshappensunreasonable-PART-too] (AP JV 169)

(15b) Protu Vatanenas suvokė, kad meškos žmonių nepuola,

betgi kartais nutinka **nepaaiškinamų dalykų**. [but sometimes happens inexclicable-PL.GEN thing-PL.GEN] (AP ZM 123)

'Reason told him [= Vatanen] that bears don't attack human beings, but sometimes events are unreasonable.' (AP YH 121)

- (16a) *Monenlaisia komplikaatioita* oli ilmennyt [various-PL.PART complication-PL.PART had appeared]. (AP SM 35)
- (16b) *Kilo* **visokių komplikacijų** [arose-3SG various-PL.GEN complication-PL.PART] (AP GNV 36) 'Complications of various sorts had arisen.' (transl. mine)

4.3. The non-congruent group

In 132 sentences the structures did not match: Fi PART – Li NOM. Since the model for the constituent order is Finnish, the translations in most cases repeat both SV and LOC – VS orders. With verbs of existence, light subjects and subject-final constituent order, even genitives would be possible in examples (17–18); according to one of the informants, genitives would require an addition of *kažkiek* 'some':

(17a) Pian hän oli järvellä,

jonne oli kokoontunut siviilejä ja karjaa [where had gathered civilian-PL.PART and cattle-SG.PART]. (AP JV 59)

(17b)Netrukus jis atsirado paežerėj,

kur	telkėsi		civiliai	ir	galvijai
[where	assembl	led	civilian-PL.NOM	and	cattle-PL.NOM
(civilių		ir	galvijų)		
civilian-	PL.GEN	and	cattle-PL.GE	EN]. (AP	ZM 44)

'Soon he was at the lake, where both people and animals were congregating.' $({\rm AP}~{\rm YH}~{\rm 47})$

The translator sometimes switched the subject-predicate order, which resulted in a more "existential" word-order, making a genitive subject appropriate to my informant:

(18a) Maastoautot jyrisivät,

telttoja	kohoili	kämpän	ympärille
[tent-PL.PART	arose	bunkhouse-GEN	around]. (AP JV 121)

(18b) Griaudė visureigiai,

aplink baraką ir daubos šlaite kilo [around bunkhouse and ravine-GEN slope-LOC arose *palapinės (/palapinių)* tent-PL.NOM / tent-PL.PART],... (AP ZM 88)

'Army trucks grumbled, tents billowed around the bunkhouse, ...' (AP YH 88)

In most cases, the obstacle for the genitive is the verb that simply does not co-occur with a genitive subject, apparently being "non-existential" or descriptive:

(19a) <i>verta</i>	<i>pirskahti</i>	<i>suuhun</i>	,
[blood-PART	spurted	mouth-I	LL] (SO P 184)
(19b) <u>Kraujas</u> [blood-NOM 'Blood spurt	<i>ištryško</i> spurted ed into her mou	<i>i</i> into ath.' (P 188)	<i>burnq</i> , mouth] (SO V 145)

To allow the genitive, one of the informants suggested adding *šiek tiek* 'a bit', 'some'. Actually, the nominative in Finnish, *veri*, would be acceptable as well: all the blood that in such a situation may spurt. The partitive denotes 'some blood'. The same goes for the following, and probably for all mass nouns:

(20a) Toinen rekka poukkoili ohitse.

Soraa	sinkoili	Aliiden	sääriin.
[gravel-PART	flew	Aliide-GEN	leg-PL.ILL] (SO P 251)

(20b) Pro šalį nudardėjo priekaba.

Žvirgždo	<u>akmenėliai</u>	lėkė	į	blauzdas.
[gravel-GEN	stone-PL.NOM	flew	into	shins] (SO V 196)
'Gravel flew	at Aliide's legs	s.' (P 255	5)	

Frequently, the nominative is used because the referent is in some sense "definite", concrete, visible or audible in its entirety, or otherwise locatable in its context, while Finnish treats such referents as all-new items, necessarily indefinite by quantification:

- (21a) Seinällä riippui realistisia **maisemamaalauksia** [wall-ADE hung realistic-PL.PART landscape painting-PL.PART] (AP HJ 152)
- (21b) Ant sienų kabojo <u>realistiški gamtovaizdžiai</u>
 [PREP wall-PL.GEN hung realistic-PL.NOM nature-view-PL.NOM]
 (AP GSM 131)
 'On the wall, realistic landscapes were hanging.' (transl.mine)
- (22a) *Ulkoa kuului laukauksia (...) vähän ajan* [outside-from was-audible shot-PL.PART]

päästä vartiomies oli nähnyt, kuinka lamppu oli sammunut,

metsiköstä oli kuulunut rytinää ja kiljuntaa, [forest-from had been-audible crashing-PART and yelling-PART]

sitten ei mitään. (AP JV 89)

(22b)*Lauke pasigirdo <u>šūviai</u>… Netrukus jis pastebėjo lempelę užgesus,* [shot-PL.NOM]

nuo miškelio pasigirdo <u>traškesys</u> ir <u>riksmas</u>, [from forest was-heard crashing-NOM and yelling-NOM]

o paskui stojo tyla. (AP ZM 122-123)

'Shots rang out from the dark gorge... A short time later the sentry saw the torch go out, heard a crashing and a yelling in the trees, and then nothing.' (AP YH 89)

(23a) Alusvaattei [underclothes		<i>olevia</i> being-PL	.PART	~~~~	l ashenk tary-mai	r ilöitä n - PL.PART
<i>rouvineen</i> with their wi	<i>tunki</i> ves crowded	<i>ulos</i> out	<i>suuresi</i> big-ELA			<i>mpästä,</i> ding-ELA]
huuto oli ko	<i>va</i> . (AP, JV 13	6)				
(23b) Garsiausia [loudly	<i>i šaukdami</i> shouting	<u>karišk</u> militar	<u>kiai</u> ry-man-P	PL.NO	<i>su</i> M with	<i>žmonom</i> wives
<i>vienais</i> in bare	<i>apatiniais</i> underclothes	<i>verž</i> crow	- ~ -	<i>iš</i> out		
<i>didžiulio</i> big-gen	<i>rąstinio</i> timber-GEN	<i>bara</i> buile	<i>iko.</i> ling-GEN	J] (ZM	[98)	

'Military men in underclothes, and their wives, were crowding out of the log building; shouting was getting vociferous.' (AP YH 97)

One of the informants appeals to quantification again: the genitive would imply that some military men were fully dressed.

In the following, the genitive would imply that there were people present who were fully dressed. In addition, the semi-dressed people are all named. The Finnish partitive introduces a previously unknown group, without claiming anything about a "surplus" (fully dressed people):

(24a) <i>Talon</i> [hous	n raj e-GEN stej	p <i>pusille</i> ps-ILL	<i>ilmaantui</i> appeared		waatteisillaan ercloth-pl.ade.poss3		
being	<i>olevia ihmisiä,</i> being-PL.PART people-PL.PART] <i>isäntä, emäntä, äskeinen nuori nainen</i> (AP JV 88)						
					,		
(24b) <i>Ant</i> [PREP	namo house-GEN	laipi N step-	<i>telių</i> ·PL.GEN	<i>pasiro</i> appear			
<u>žmon</u> people	<i>ės</i> e-PL.NOM	· ·	t <u>iniais drab</u> nderwear]	<u>užiais</u> : š	feimininkas,		

šeimininkė, ta pati jauna moteris. (AP ZM 64)

'People in underclothes were appearing on the doorsteps: the farmer, his wife, and the same young woman.' (AP YH 66)

In the following, instead of the fairly individuated NPs, one of the informants suggested a lighter construction with genitives. The second informant accepted the genitives as implying that there are other kinds of fish in the river as well:

(25a) <i>Siinä</i> [that-INE	<i>joessa</i> river-INE	<i>asustaa</i> lives	<i>aika</i> rather	<i>mukavia</i> nice-PL.PART		
haukia pike-PL.PA		aankokoisid ight-sized-PL		i stinahvenia ing-perch-PL.PART]		
(25b) <i>Toje</i> [that-LOC	<i>upėje v</i> river-LOC li	<i>eisiasi <u>ger</u> ves goo</i>	r <u>os</u> o d- PL.NOM	<u>kepti</u> fry-INF		
<u>lydekos ir neblogi ešeriai</u> pike-PL.NOM and not-bad-PL.NOM perch-PL.NOM						
<u>(/lydeku</u> / live pike-		<u>neblogų</u> not-bad-PL.GE	<u>ešerių)</u> EN perch-PI	L.GEN]. (VH 43, 39)		

'In that river, there live rather nice pikes and perches that are of the right size for frying (/pikes and not-bad perches).' (transl. mine)

For most of the non-corresponding sentence pairs, the explanation provided was either quantification, or that the verb simply required a nominative subject. In a few cases a genitive was presented as a possible alternative.

However, "requiring a nominative" may have its referential motivations as well, as was shown by example (25) above. In the above examples (17–23), the narrator or protagonist "hears" or "sees" all the entities in question, they are locatable – hence the characterization of nominative as "concrete" in grammars. In Finnish, another motivation takes precedence: introduction of a scene in (23) with previously unknown details takes the partitive case in plural. As for the remark by Ambrazas (2006: 225) that the forms *matyti* and *girdėti* can be used with genitives, in this corpus only one such case was found (see the list in the Appendix). Example (23) shows that a sentence-initial subject with a narrow denotation, with the verb indicating a directional movement that makes the entities "visible" (locatable) to the protagonist/narrator, cannot be represented by the partitive genitive. 4.4. Lithuanian verbs co-occurring with partitive genitive subjects in existential sentences

Next, a list of verbs with partitive genitive subjects in the corpus is presented in order to exemplify the semantic sphere of the application of their usage - all the collocations found in the material are presented in the appendix.

Existence:

- *Atsirasti* 'be found, appear' e.g.: *atsirado mokyklų, kuriose*... 'there were schools, in which...'
- *Būti* 'be', e.g.: *yra kitų sekretorės darbą išmanančių asmenų*; 'there are other persons skilled in secretarial work'
- *Gyventi* 'live', e.g.: *kur nors gyveno lapių*; 'where even foxes live'
- *Augti* 'grow', e.g.: *Ir kitokių medžioklės ūkio pareigūno rekomenduotų augalų tenai augo*; 'there grew other plants recommended by the game warden as well'
- *Likti* 'remain', e.g.: *kad liktų vietos*; 'so that there remained space'
- Palikti 'remain', e.g.: paliko purvo; '(some) dirt remained'

Entering the scene:

- *Apsilankyti* 'visit', e.g.: *apsilankė svečių*; 'guests come for a visit'
- *Ateiti* 'come', e.g.: ...*kokių girtuoklių atėjo*; 'what kind of drunkards came'
- *Atvykti* 'come, arrive', e.g.: *atvyko žmonių*; 'there came people'
- *Kilti* 'arise' e.g.: *kilo visokių komplikacijų*; 'all sorts of complications'
- *Pasimatyti* 'emerge', e.g.: *pasimatė visokeriopo pavydo*; 'all sorts of envy emerged'
- *Pasirodyti* 'appear', e.g.: *pasirodė kelnėtų moterų*; 'women in trousers appeared';
- Rastis 'appear', e.g.: rasis mėlynių; 'bluemarks will appear'
- *Susirinkti* 'gather', e.g.: *susirinko... moterų ir vyrų, senų ir jaunų*, 'women and men, old and young gathered'

Accidental occurrence:

- *Atkliūti* 'happen', e.g.: *atkliuvo prasčiokų*; 'passers-by happened by'
- *Nutikti* 'happen': *nutinka nepaaiškinamų dalykų*; 'inexplicable things happen'
- *Pakliūti* 'hit, happen', e.g.: *paklius tokių*, *ir kitokių*; 'these and other things happen'

Existence within vision:

- *Baltuoti* 'show, be white', e.g.: *baltuojo valgyto svogūno likučių*; 'remnants of the eaten onion appeared white'
- *Matyti, matytis* 'see, to be seen', e.g.: *ir taip matyti kaulų sužalojimų*; 'and so there can be seen bone fractures'

Fuzzy existence:

- Knibždėti 'teem', e.g.: knibždėjo žmonių; 'there teemed people'
- Lakstyti 'roam about', e.g.: laksto žvėrių; 'animals roamed about'
- *Šmėžuot*i 'teem', e.g.: *šmėžavo visokiausių gyvių*; 'all sorts of creatures teemed about'
- *Sklandyti* 'fly', e.g.: *sklandė visokių gandų*; 'all sorts of rumours spread around'
- *Šlaistytis* 'roam', e.g.: *šlaistėsi visokių žmogystų*; 'all sorts of people roamed about'
- *Stirksoti* 'stick out', e.g.: *stirksojo/stirksodavo šiaudų*; 'straws were sticking out'
- Perhaps *baltuoti* could be included in this group as well.

It is obvious that the verbs are semantically close to bare existence and emergence. "Bleaching" of lexical verbs, as it was found in Finnish, hardly seems to take place. Presumably, even if the verb is descriptive, but the activity is unordered, spreading or coming from different directions, leading to indistinctness and impossibility of counting, the partitive genitive is appropriate (rumours spread, all sorts of animals are teeming, roaming about etc.). A fuller list of such verbs, requiring more study of translations, is not feasible at this stage.

5. Nouns with decreased referentiality

The above list (with the appendix) indicates that the subjects are, besides being quantificationally indefinite, also non-individuated and by their denotation very wide. This is assisted by the frequent attributes 'other', 'all sorts of'. In some cases, the existence of a species is asserted. Thus, the reference to 'kinds', if not 'mass', seems to apply in every case.

In research on other Indo-European languages, especially the closest branch of Slavic, the partitive genitive has in recent times much occupied researchers. Barbara Hall Partee & Vladimir Borschev suggest in numerous articles (most recently in 2012 with other authors) a category shift for Russian negated object and subject genitives, with decreased referentiality. So far, the authors have "very little independent evidence for the shift of the demoted subject to type <e, t> in Russian affirmative existential sentences" (Borschev & al. 2010: 20). Naturally, this follows, as the genitive as subject in the literary Russian language is limited to certain lexical quantifying verbs. – Partee seems to continue her idea here of attributive readings of NPs, which she had proposed already in the 1970s (Partee 1972).

Ilja Seržants takes up the above suggestion, applying it to Lithuanian, Latvian, and the Russian dialectal bare partitives. To his mind, the original understanding of partitivity as part of a particular, definite group, has lost this semantics. "The part of the group is not a part of it but rather a particular instantiation of the kind/subkind that the embedded NP refers to. The form does not imply a "complement" (remainder of the group), but encodes pseudo-partitivity like English 'a cup of tea" (Serzhant, -MS s. 1). In Finnish, and Finnic languages, according to Seržants, the partitive implies an indefinite and unbounded quantity, a "generic" set (s. 7, referring to Kiparsky 1998, who deals with Finnish partitive object NPs). In subject position, the partitive embodies decreased referentiality (as suggested by Partee): the participant which is underdetermined referentially is also often underdetermined quantificationally. (ibid.)

The above characterization fits the Lithuanian usage, for which even a characterization of a "fuzzy set" might be applied, but for Finnish subject partitives a less stringent definition might be in order. Finnish partitives, though quantificationally indefinite, may quantify over a set of specific individuals, out of which a set is delimited: *Tu-olla kulkee niitä meidän eilisiä tuttavia* [there go-PRS.3SG those-PART our yesterday-PL.PART acquaintance-PL.PART] 'There go (some of) those acquaintances of ours from yesterday'. In Lithuanian, according to my informant, such a degree of definiteness requires a nominative subject. As suggested in Fennistic literature, the partitive might be called quantificationally open (Vilkuna 1992: 52, referring to Matti Larjavaara's studies), as the mass or set it refers to need not leave a surplus; the form merely allows such an interpretation.

6. Conclusion

Thus, the Lithuanian partitive genitive subject is in terms of quantification indefinite ('not-all'), and in terms of referentiality unidentifiable to the speaker. The nominative is in respect of definiteness unmarked (as in Ambrazas 2006: 225). In Finnish, the marking of the opposition is as follows: the nominative is marked for quantificational and referential definiteness ('all'), and the partitive subject is marked for quantificational indefiniteness ('not-necessarily-all, maybe'). Andrew Chesterman who is not happy with the term definiteness, requiring a tertium comparationis for contrasting Finnish and English definiteness, analyses it as comprising the features +/- identifiable, +/- locatable, and +/- all (and +/- one, for the article use). In terms of these, the Finnish partitive is non-identifiable, non-locatable and not-all. It turns out that the English bare plurals (and unstressed *some*) have exactly the same values (Chesterman 1991: 170; an exception must be made for generics where English and Finnish behave differently). In fact, the English translations of Oksanen and Paasilinna showed in general the same correspondence with Finnish. Should Lithuanian join the club? Yes, but it is not enough. It seems that while Finnish partitive is "open" (not-necessarily all), the Lithuanian partitive genitive designates more strongly "not-all". Still, for both goes the characterization as "quantification irrelevant". As for word order, the basic tendency is the same: Locative element first, subject NP last. Slight adjustments must be made for Finnish.

From a diachronic typological point of view, despite common semantic potential, the systems are pressing the usages apart. The partitive is one of the central cases of Finnish syntax, and its application to subjects is even spreading. The partitive genitive in the Baltic languages, especially as a subject, is on the fringe of syntax, and its usage is on the wane. In Lithuanian, it is attached to only a few particular verbs types.

As for hypotheses of language contact, in the 1980s, Lars-Gunnar Larsson presented a hypothesis according to which the partitive, found in all Finnic languages and being originally a separative case, was influenced by the Baltic genitive usage, which represented an older Indo-European usage (an idea presented earlier by Karl Kont in 1963). This presupposes a high degree of bilingual population, or very close contacts, which is compatible with the loan-word studies. In the earlier stage the separative was used for objects of certain verbs and for predicatives of material. The partitive in Proto-Finnic was first identified with the Baltic genitive in these functions, and the Proto-Finnic speakers extended the use of partitive to all the functions of the Baltic genitive, including partive subjects (Larsson 1983: 141-143). And Finnic languages continued the extension in objects towards the expression of aspectuality.

So far, there seems to be no final general opinion on the acceptability of this hypothesis, judging by the suggestions of one evaluator who recommended the inclusion of the works by K. Kont and H.-R. Ritter on the Vepsian objects. I regret to admit that I found it unexpedient to treat them here, given the space allotted to this article on Finnish and Lithuanian subject partitives, and leave them to the kind readers to ponder on.

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Abbreviations

ACC	Accusative	NOM	Nominative
ADE	Adessive	NP	Noun Phrase
ADJP	Adjective Phrase	PART	Partitive
ADVP	Adverbial Phrase	PASS	Passive
ALL	Allative	PL	Plural
CON	Connegative	POSS	Possessive
COP	Copula	PRS	Present
ELA	Elative	PREP	Preposition
FREQ	Frequentative	PST	Past
GEN	Genitive	PTC	Particle
ILL	Illative	PTCP	Participle
INE	Inessive	S	Subject
INF	Infinitive	SG	Singular
LOC	Locative	SUBJNP	Subjective Phrase
NEG	Negative	V	Verb
NEUTR	Neutre	XP	Any type of phrase

Appendix

Apsilankyti 'visit': apsilankė svečių; 'guests came'

Ateiti 'come': *kokių girtuoklių atėjo*; 'what kind of drunkards came' *Atkliūti* 'happen': *atkliuvo prasčiokų*; 'passers-by happened by' *Atsirasti* 'be found, appear': *atsirado mokyklų, kuriose*...'there are schools, in which...'

Atvykti 'come, arrive': atvyko žmonių; 'people came'

Augti 'grow': *Ir kitokių medžioklės ūkio pareigūno rekomenduotų augalų tenai augo*; 'other plants recommended by the game warden grew there as well'

Baltuoti 'show, be white': *baltavo popierių; valgyto svogūno likučių*; 'papers; remnants of the eaten onion appeared white'

Būti 'be'; *yra vertingų daiktų; būna (iter) svečių; svetimų žmonių; kitų sekretorės darbą išmanančių asmenų; tokių žmonių; vilties, svajonių, gėrio; sumuštų; rašomųjų mašinėlių ir net pinigų; viršutinių marškinių ir kavos; kurtinių; reikalų; miegamųjų vietų; ištikimųjų tarakonų; kokių nors gyvūnų; žuvies; kitų dalykų; gyventojų; karamelių; padoraus jaunimo; kitų puoselėjančių panašias mintis; tokių, kurie...; tokių sisukryžminimų; kitų pažįstamų; galvijų; arklių; žiedų; žurnalistų; 'there are/were valuable things; guests; strangers; other persons skilled in secretarial work; such people; stewed whitefish; big hams baked in an oven; hope, dreams, goodness; injured people; typewriters and even money; outer shirts and coffee; wood grouses; affairs; sleeping places; inevitable cockroaches; whatever animals; fish; other things; inhabitants; candy; proper youth; others that cherish comparable thoughts; such that...; such hybrids; other acquaintances; cattle; horses; flowers; journalists'*

Gyventi 'live': kur nors gyveno lapių; 'where even foxes live'

Kilti 'arise': *kildavo (freq) naujų klausimų; visokių komplikacijų; nesutarimų*; 'new questions; all sorts of complications; disagreements arose'

Knibždėti 'teem': knibždėjo žmonių; 'there were people teeming about' Lakstyti 'roam about': laksto žvėrių; 'there are animals roaming about'

Likti 'remain': kad liktų vietos; 'in order to leave space'

Matyti, matytis 'see, to be seen': tokių dryželių matėsi ir ant kaklo, lyg rimbo kirčių, arba nagų brėžių; taip matyti kaulų sužalojimų; 'one can see similar streaks, whiplashes, scratches of nails; bone fractures' Nutikti 'happen': nutinka nepaaiškinamų dalykų; visko; nutikdavo (freq) tokių dalykų; 'inexplicable things; such things happen'

Pakliūti 'hit, happen': *paklius tokių*, *ir kitokių*; 'these and other things happen'

Palikti 'remain': paliko purvo; '(some) dirt remained'

Pasimatyti 'emerge': *pasimatė visokeriopo pavydo*; 'all sorts of envy emerged'

Pasirodyti 'appear': *pasirodė kelnėtų moterų; bandos išmintų takų, nusausinimo kanalų...*; 'women in trousers; paths trampled by cattle, dried canals appeared'

Rastis 'appear': rasis mėlynių; 'there will be bluemarks'

Sklandyti 'fly': *sklandė visokių gandų*; 'all sorts of rumours were spreading around'

Stirksoti 'stick out': *stirksojo/stirksodavo šiaudų*; 'straws were sticking out'

Susirinkti 'gather': *susirinko... moterų ir vyrų, senų ir jaunų*; 'women and men, old and young, gathered'

Šlaistytis 'roam': *šlaistėsi visokių žmogystų*; 'all sorts of people were roaming about'

Šmėžuoti 'teem': *šmėžavo visokiausių gyvių*; 'all sorts of creatures were teeming about'

Liettuan partitiivinen genetiivi ja suomen partitiivi eksistentiaalilauseissa

Marja Leinonen

Liettuan partitiivinen genetiivi ja suomen partitiivi kattavat laajan semanttis-syntaktisen kentän. Yksi näistä kentistä on eksistentiaalilauseen subjekti.

Huolimatta kattavuudesta liettuan partitiivisen genetiivin tekstuaalinen käyttö subjektina eroaa suomen partitiivista. Vaikka näiden sijojen käytön määritelmissä molemmissa kielissä viitataan epämääräiseen olioiden tai aineen määrään – nominatiivin viitatessa tiettyyn määrään (tai konkreettiseen totaliteettiin), – suomen partitiivin käyttö on laajempaa. Esitän esimerkkejä sellaisesta käytöstä suomenkielisen kaunokirjallisuuden käännöksissä, ja pyrin määrittämään liettuan vastineiden motivaatioita. Tässä käsittelen vain myönteisiä eksistentiaalilauseita, kielteisten vuoro tulee myöhemmin.

Lietuvių kalbos partityvinis kilmininkas ir suomių kalbos partityvas egzistenciniuose sakiniuose

Marja Leinonen

Lietuvių kalbos partityvinis kilmininkas ir suomių kalbos partityvas padengia platų semantinį-sintaktinį lauką. Vienas iš tų laukų yra egzistencinio sakinio veiksnys. Nepaisant padengimo lietuvių kalbos partityvinio kilmininko tekstualinis vartojimas skirias nuo suomių partityvo. Nors šių linksnių apibrėžimas abiejose kalbose nurodo neapibrėžtų būsenų arba substancijų kiekį, kuomet vardininkas nurodo žinomą kiekį (arba konkrečią visumą), suomių partityvo vartojimas yra platesnis. Pristatau tokio vartojimo pavyzdžius suomių grožinės literatūros vertimuose ir bandysiu apibrėžti atitikmenų lietuvių kalboje motivacijas. Nagrinėsiu tik teigiamus egzistencinius sakinius, neigiamų eilė ateis vėliau. MAIJA TERVOLA Tampere

Comparing object case alternation in Finnish and Lithuanian

Object case alternation is one of the most complex grammatical phenomena in the Finnish language. Several semantic oppositions can be expressed with the syntactic opposition of partitive and total case. Many Finnic languages share somewhat similar object case alternation, and interestingly so do some of the surrounding Baltic and Slavic languages. This paper compares this object case alternation in Finnish with that of one of these neighbouring languages, Lithuanian. My aim is to illustrate the kinds of patterns that exist in the object case alternation in these two languages. This paper deals with the following phenomena: aspect, quantity of the object, and negation. It will show which patterns are common for both of these languages and which exist only in one of them, and also how the patterns differ from one language to another. It will also place the comparison in a larger areal and historical context.

1. Introduction

Finnish and Lithuanian are the endpoints of an interesting linguistic and areal continuum, located on the eastern shore of the Baltic Sea. In the north, there are the two biggest Finnic languages, Finnish and Estonian, and in the south, the two remaining members of the Baltic language branch, Latvian and Lithuanian. This continuum has a historical background; although not genetically related, their ancestors – Finnic and Baltic – were in close contact in the Proto-Finnic era (around 1500–1000 BC) (Larsson 1984, 2001; Laakso 2001; Koptjevskaja-Tamm & Wälchli 2001). This can be seen in numerous loan words

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from Baltic to Finnic, which separate the Finnic languages from other branches of the Uralic languages (Laakso 2001: 201). The majority of the loanwords refer to concepts of everyday life, kinship, and agriculture, and thus imply, that the relations between Finnic and Baltic people were intense and that there were vast bilingual areas (Laakso 2001: 204; Koptjevskaja-Tamm & Wälchli 2001: 618).

The Finnic-Baltic continuum is part of a larger linguistic area. The Baltic Sea has been a center for the formation of a dense linguistic locus, which is suggested by Koptjevskaja-Tamm and Wälchli (2001) to be defined as the Circum-Baltic contact superposition zone, where languages of different genetic backgrounds - Finno-Ugric, Slavic, Germanic, and Baltic - have been in contact in many different ways for millennia (Koptjevskaja-Tamm & Wälchli 2001: 728). There has not been any clear and stable cultural center that would have been the main source of cultural and linguistic innovations but more of a mixture of various micro and macro contacts that have raised linguistic influence in various directions. Some directions have still been stronger than others; the influence from two bigger language families, Germanic and Slavic, two smaller ones, Finnic and Baltic, have been stronger than vice versa. As a consequence, there are a lot of Germanic and Slavic loan words in the smaller languages, Finnish, Estonian, Latvian, and Lithuanian (Balode & Holvoet 2001: 45; Laakso 2001: 201).

In addition to the similarities in the lexicon, there are many grammatical features common to Circum-Baltic languages (see e.g. Koptjevskaja-Tamm & Wälchli 2001: 674–723). Some of them are considered to be result of language contact, for example, IE influence in the morphosyntax of the Finnic languages, such as SVO word order and the use of a copula (Laakso 2001: 204). It is, however, much more difficult to trace grammatical influence from one language to another. Synchronic similarities in syntax cannot easily be considered as evidence of borrowing (Koptjevskaja-Tamm & Wälchli 2001: 627; Appel & Muysken 2005: 163).

Object case alternation is a quite common grammatical phenomenon in many Circum-Baltic languages. In addition to Finnish and Lithuanian, there is also some kind of object case alternation in Estonian, Latvian, Russian, and Polish (Koptjevskaja-Tamm & Wälchli 2001: 655). On the universal level, the differential object marking (DOM) itself is not rare among the languages of the world (Lazard 2001: 880; Koptjevskaja-Tamm & Wälchli 2001: 648), but the Circum-Baltic area is an interesting environment for this phenomenon because of its linguistic density and some specific characteristics, such as relatively complex morphology, especially compared to other European languages, which have mostly lost their ancient case systems (Bossong 1988: 146; Ambrazas 1996: 216).

In this paper I will compare the object case alternation in Finnish and Lithuanian. They are examples of case alternation in this CB area, and are interesting also from the perspective that both are considered rather conservative representatives of their respective groups (Laakso 2001: 187; Balode & Holvoet 2001: 43). There has also been discussion about the role of the Baltic influence in Finnic case alternation becoming more grammaticalized (Larsson 1984, 2001; Larjavaara 1991). This study hardly can offer any new evidence for this question, but it may bring light to possible scenarios for this issue. My contribution to the theme in this paper is to analyse the differences in more detail in modern language using contemporary novels and their translations as data. My questions are: To what extent is the existing picture of object case alternation in Finnish and Lithuanian accurate, and is it possible to define that picture further? Which meanings exist in both languages, which only in one or the other language? Finally, my goal is to put this new more precise picture in the context of language change and language contact. This paper by no means aims to reach all the possible nuances that can be expressed with object case in these two languages, and it most probably might even be impossible. The premise for this study is semantic comparison, to which the formal dimension is subordinate.

2. Semantics of the relevant linguistic categories

Object case alternation is a fairly well studied phenomenon in the field of typology. Differentiating object from subject is common to all accusative languages, although not all accusative languages differentiate them morphologically (Haspelmath 2005). Here object is

defined both formally and semantically. Formally the object is the NP which is differentiated from the subject by one of the object cases: partitive/genitive/t-accusative in Finnish and genitive/accusative in Lithuanian. The semantic criterion is that the NP refers to the semantic role of patient. Formal definition alone does not suffice, as there are formally equivalent NP arguments that lack the semantic property of the object: the NP in the object case does not refer to the patient but to the amount (length, duration, weight, etc.) of the action or the object and is considered an adverbial, as in Finn. Juoksin kilometrin, Lith. Aš nubėgiau kilometrą 'I ran a kilometer' (ISK § 973; Ambrazas & al. 2007: 501–502). Nor does the semantic criterion alone suffice, because the semantic role of the patient can sometimes be encoded morphosyntactically not as an object but, for instance, as a subject, as in Sain hieronnan 'I got a massage'. Nevertheless, the category of the object is not clearly outlined, but if we use both formal and semantic criteria, we find all the relevant instances necessary to compare this particular type of case alternation.

The above mentioned adverbials taking the object case partly behave like regular objects: for instance, they become a partial case in negated phrases, but they lack aspectual case alternation and are thus left out from this study. For example, the verb Finn *odottaa*, 'to wait', takes a partitive object also in affirmative clauses, but the adverbial of duration is in a form of a total object, as in *Odotin tunnin* 'I waited for an hour', where *tunnin* 'for an hour' is in a total object case, as opposed to a regular object *Odotin bussia* 'I waited for the bus', where the object *bussia* 'bus' is in the partitive.

The morphological cases involved here, the partitive in Finnish and the genitive (*kilmininkas*) in Lithuanian, are so-called partial cases, and they are in opposition with the total case in Finnish, and accusative in Lithuanian. Especially in Finnish the term total case is convenient here, as it is morphologically heterogeneous and consists of three morphological variants: nominative and genitive. They express the same semantic contents and functions depending on the clause structure or the number of the object: plural total objects are in nominative. Also personal pronouns has a special total object form, the so-called *t*-accusative (*minut* 'me', *hänet* 'him/her' etc.). In this study I disregard the different forms of total object and focus only to the opposition of the total and partial object. From this point of view, referring to all those morphological cases with the semantic term *total case* will be useful.

Universally, there is a great deal of variation, with regard to the semantic factors that determine the object case. These factors can be based on the inherent characteristics of the object referent. Some factors are inherited, such as animacy, humanity, or are connected with referential conditions, such as definiteness, thematic positions, negation, or aspect (Bossong 1988: 158; Lazard 2001; de Swart & de Hoop 2007). The factors involved in Finnish and Lithuanian, are definiteness, negation, and aspect, as they are known to play an essential role in object case alternation and affect it systematically (for Finnish, see ISK § 930; for Lithuanian, see Ambrazas & al. 1997: 486, 503, 655). This paper is based on my earlier work (Tervola 2006), in which the case alternation of these two languages is explained in more detail.

See the examples below¹:

Finnish:		at-PAST-1SG		<i>omena-a.</i> apple-PART le.' / 'I was eating an/the apple.'	
	<i>Sö-i-n</i> eat-PAST-1SG 'I ate up an/the apple.		omena-n. apple-TOT		
Lithuania	an:	<i>Aš</i> I 'I ate s	1	<i>alg-iau</i> eat-1SG.PAST he apple.'	<i>obuoli-o</i> . apple-GEN.
		Aš Ι 'I ate ι		<i>alg-iau</i> eat-1sG.PAST apple.'	<i>obuol-į</i> . apple-ACC.

^{1.} The following abbreviations are used in the glosses: ABL=ablative, ACC= accusative, ADE=adessive, DAT=dative, ELA=elative, ESS=essive, FUT=future tense, GEN=genitive, ILL=illative, IMP=imperative, INE=inessive, INF=infinitive, INST=instructive, LOC=locative, NEG=negation, NOM=nominative, XP=Xth person, PASS=passive, PAST=past tense, PART=partitive, PFV=perfective, PL=plural, POSS=possessive, PRES=present tense, PTCP=participle, Q=question, REFL=reflexive, SG=singular, TOT=total object.

The meaning of the partial case in such sentences can be described with words such as irresultative, partial, unbounded, open, and weak, as opposed to the accusative case, the meaning of which can be described with the words resultative, whole, bounded, closed, and strong (cf. Kiparsky 1998; Leino 1991; Larjavaara 1991; de Swart & de Hoop 2007).

Unboundedness has been suggested to be the common denominator of the meaning of the Finnish partitive case (see Kiparsky 1998; Huumo 2010). It is often assumed that the Finnish partitive as an object case refers to some kind of unboundedness, and the total case to some kind of boundedness. Unboundedness may well be the common denominator of the semantic content, which all the partitive objects refer to in Finnish, but it is not very informative in terms of understanding the phenomenon or comparing the phenomenon with other languages. The concept of unboundedness is relatively vague at the general level, so the more interesting approach, in my opinion, is to analyse, what kind of unboundedness there is in different contexts and different levels of language. That is why it is fruitful to examine aspect, quantitative definiteness, and negation as separate issues.

Aspect is well known to play a significant role in Finnish object case alternation. It is also found in Estonian but is guite unique universally (Dahl 1985: 69). Aspect is also a vague concept, lacking a universal and unequivocal definition. Aspect is based on characteristics of events, and by event I mean here a conceptual scheme of a part of reality. Events can be divided according to, for instance, whether the event is stable or unfolds over time, whether it has a schematic end-point or not, and whether it consists of a categorical change (ISK § 1501; Leino 1991; Pajunen 2001). Here I use the following categories based on Finnish aspect. State is an event that is stable and does not unfold in time. States can be static (He owns a car) or dynamic (He supports *you*), where the former is a state that does not require any energy input but is the status quo until something changes it, while the latter needs a constant energy input, otherwise it will cease. Process is an event, which unfolds in time, and it can be telic, that is, there is an inherent end-point in the scheme of the event as in 'to bake a cake', that is, the event will be complete when the cake is ready, or atelic, where there is no schematic end-point as in to grow, as growing can in principle go

on forever. Also, the opposition of durativity *versus* punctuality plays a role in aspect, as only durative events can be left uncompleted.

On the basis of the characteristics of events, verbs can have aspectual properties, when they refer to certain kinds of events. This phenomenon is also known as **Aktionsart** (Kiparsky 1998: 281; Leino 1991: 47; Huumo 2010). Some verbs are thus confined to a certain aspect, for instance the verb *to shine* refers to a state which is stable, does not unfold over time, does not have an end-point, and does not describe any categorical change, whereas the verb *to break* is its opposite in all respects. Verbs can be classified according to their semantic properties, which are based on the properties of events that they describe. This is what I refer to as **lexical aspect**.

Some verbs are flexible in terms of aspect, without coercion. They can form aspectually different clauses depending not on the inherent characteristics of the event or the verb but on the point of view or the role of the event in the speech or the text (Dahl 1985: 73; Leinonen 1984: 250). This opposition is considered as the prototypical aspectual opposition, which is represented often by the Slavic aspect system and described with concepts **perfectivity** and **imperfectivity** (Dahl 1985: 69). Bernard Comrie in his classic book describes the prototypical perfectivity–imperfectivity opposition as follows:

"perfectivity indicates the view of a situation as a single whole, without distinction of the various separate phases that make up that situation, while the imperfective pays essential attention to the internal structure of the situation" (Comrie 1976: 16).

To be able to view an event as a whole, one must determine, what is the end-point, the reaching of which makes the event whole or complete. The existence of an end-point can be a part of the schematic meaning of the verb as it can be also be determined by context or the object (Leino 1991: 171; Larjavaara 1991: 388). For instance, the verb *to sing* can be seen as a stable on-going activity with no end-point, as in *They were singing all the time*, or it can be viewed as an act that comes to an end when the song is finished, as in *He will sing the national anthem in the evening*. (Kiparsky 1998: 281; ISK § 1506). The flexibility varies according to the characteristics of the verbs. For instance, non-durative verbs, such as *to find*, are hardly possible to use in an imperfective aspect **I* was finding my keys, when suddenly.... Atelic verbs, on the other hand, with no intrinsic end-point, are hard to coerce into a perfective aspect, but possible, for instance with an external end-point expressed with an adverbial, as for instance *Rakastin teidät rappiolle*² 'I loved you down-and-out', where the result of loving is going down-and-out, even though usually loving is not seen unfolding towards any result. This kind of aspectual differentiating I call here **grammatical aspect**, to distinguish it from the earlier mentioned lexical aspect.

One crucial factor affecting object case alternation both in Finnish and in Lithuanian, is the **quantitative definiteness of the object**. This concerns only divisible entities, including mass entities such as *coffee*, and plurals, such as *berries*, whereas singular whole entities are always of a definite amount, such as *a cat*, *a building*. For instance, *Join kahvia* 'I drank coffee' with a partitive object, refers to an indefinite amount of coffee. Divisible entities can be bounded in their context, as in *Join kahvin* 'I drank up the coffee', where the total object refers to a quantity which is defined in the context.

The Fennistic tradition uses the terms resultative and irresultative (Itkonen 1976; Leino 1991). The content of these terms is a kind of mixture of verbal and nominal aspect, but is most often connected to the morphological cases of object. These terms can refer to verbs or clauses involved in object case alternation. Resultativity refers to the fact of having total object case, while irresutaltivity refers to having a partial object case. It is also used to refer to verbs that typically take a total object or a partial object. Verbs that can have either total or partial object are called resultative-irresultative (Itkonen 1976: 176; Leino 1991: 138–139). This division is based on the typical behaviour of the verbs, which gives only a vague classification, as the majority of Finnish transitive verbs can take either case, through various coercive structures. What is relevant here, is not the typical behaviour but the ability of the verb to form a resultative clause, in other words, the ability to take a total object, (Larjavaara 1991: 383). Verbs such as to wait for, to search, are inherently irresultative. The ability is of course not a strict criterion, either, as the verbs are often polysemic and therefore can be coerced to take the other object case. An example of this would be the verb *etsiä* 'to search', which is irresultative but can be coerced into a resultative clause use. In English, this is typically done with an adverbial 'up' or 'out', as in *He searched out a map*, whereas the inherent aspect, without the coercion is unbounded, *He is searching for a new map* (Kiparsky 1998: 288–293). In this paper I use the terms resultative and irresultative as semantic concepts, which refer to the characteristics of a verb. An irresultative verb has a strong tendency to be unbounded, e.g. *to wait for*, and a resultative verb – to be bounded, e.g. *to find*.

Quantitative definiteness is often referred to with similar terms as aspectual opposition, such as bounded – unbounded, closed – open, and so on. It is also sometimes included in the concept of aspect, as so called nominal aspect, distinct from verbal aspect as explained above (Huumo 2010; Vilkuna 2000). In a way an event can be seen as unbounded, if the object entity is of indefinite quantity and thus there is still something left uncompleted. It can be reasonable to do so, as the concept of unboundedness surely has a common content, independent of the referent. But here it is necessary to analyse them apart, to be able to distinguish, whether the partial case refers to the verbal or nominal aspect. In the sentence, I went to the shop and bought some *milk*, the event itself is bounded, so the verbal aspect is perfective. On the other hand, in the sentence He is washing the dog, the object "the dog" is involved in the event as whole and is thus bounded but the event itself is unbounded, in this case progressive. Both clauses would have a partitive object in Finnish, as only one unbounded element is sufficient to trigger the partitive object and the context would determine, what the partial case is referring to.

One factor that affects object case alternation widely in CB languages is **negation** (Koptjevskaja-Tamm & Wälchli 2001: 655). In object case alternation the most relevant type of negation is the clausal negation or "standard negation", which means that the content of the whole clause is denied, not just a part of it (Dahl 2010: 10–11). Typologically, there are numerous ways to express clausal negativity. In Finnish, clausal negation is expressed with an auxiliary verb e-, which is linked to the finite verb (Vilkuna 2003: 260–261; ISK § 1615). In

^{2.} From the poem "Auringon hyvästijättö" by Eino Leino (In Helkavirsiä 2, 1916).

Lithuanian, negation is expressed with a marker *ne*, which can be a prefix or a particle. In clausal negation it is a prefix that is attached to the finite verb, as in *Tevas negriš rytoj* 'Father will not return tomorrow' (Ambrazas & al. 1997: 667). Unlike in Finnish, the negative marker can be a syntactically independent particle. It can be linked not only to a finite verb but to other constituents, for instance to an infinitive, as in *Jis praše mane dar nevažiuoti* 'He asked me not to leave yet', or to an adverbial phrase, *Gyvename ne del turto* 'We live not for riches' (Ambrazas & al. 1997: 667). In addition to clausal negation, there are expressions that act mostly inside of a negated clause, which are called **negative polarity** (ISK § 1615; Dahl 2010: 30). For instance, the English pronoun *any* is an examples of negative polarity, because it is typically used in a negative clause, whereas *some* is compatible with an affirmative clause.

To conclude this section, I wish to point out that the same kind of alternation, based on partly the same semantic factors, is seen in both languages also in the subject case. The variant with partial subject is the so-called existential clause (ISK § 916–918, Ambrazas & al. 2007: 504).

Finnish: *Ihmis-i-*ä *tule-e*. People-PL-PART come-3SG.PRES 'People [indefinite quantity] are coming.'

Ihmise-ttule-vat.People-PL.NOMcome-3PL.PRES.'People [definite quantity] are coming.'

Lithuanian: Žmon-ių *atein-a*. People-PL.GEN come-3P.PRES. 'People [indefinite quantity] are coming.'

Žmon-ėsatein-a.People-PL.NOMcome-3P.PRES.'People [definite quantity] are coming.'

The subject case alternation is presented in more detail by Marja Leinonen in this volume, p. 158–188.

3. The case systems of Finnish and Lithuanian

Finnish is typologically mainly an agglutinative language with its 15 inflectional cases and relatively low amount of analytic adpositional constructions. Lithuanian, on the other hand, has somewhat equally both agglutinative and analytic features. Western Finnic languages have been in close contact with IE languages for a long time and so they have become typologically closer to them (Dahl 2008). Partial object cases, the Finnish partitive and Lithuanian genitive, are known to have changed in both languages in their history from a concrete local meaning to more complex and abstract meanings (Larjavaara 1991: 386; Schmalstieg 1987: 160).

Lithuanian has seven inflectional cases and a rather rich system of prepositional constructions. In contemporary languages the difference is best seen in local expressions. In Finnish, local relations are expressed mostly with cases, whereas Lithuanian has lost its richer locative case system, and the only such case left is the locative (*vietininkas*). Other more specific local relations are expressed with analytic prepositional constructions (Ambrazas 2007: 261–267). The grammatical cases are: nominative and genitive in both languages, partitive in Finnish, and accusative and dative in Lithuanian.

Besides the main syntactic roles, the grammatical cases in Finnish and Lithuanian share some of the same functions: genitive marks possession in both languages: Finn *miehe-n kirja*, Lith *vyr-o knyga*, man-GEN book '[a/the] man's book'. In participial constructions, the genitive is also the case of the agent: Finn *lapse-n rakenta-ma torni*, Lith *vaik-o pastaty-tas bokštas*, child-GEN build-PAST.PTCP tower – 'a tower built by a child'. With deverbal noun derivations the genitive is used to mark the object in both languages in the same way: Finn *marjo-jen poimiminen*, Lith *uog-ų raškymas*, berry-PL.GEN picking, 'the picking of the berries' or the agent: Finn *linnu-n lento*, Lith *paukšči-o skrydis*, bird-GEN flight, 'the flight of a bird'.

The nominative is the unmarked case in Finnish; however, in Lithuanian there is no unmarked case, as the nominative is formed with a suffix just as all the other cases. The accusative in Lithuanian has one main function: it is the non-marked object case in most sentences. In addition to this function, the accusative is used for quantities such as duration, length, and weight, as in *Aš bėgsiu vien-ą kilometr-ą* 'I will run one-ACC kilometer-ACC'. The accusative is also used to mark timing, as in *Grįšiu ruden-į* 'I will be back in the autumn-ACC'.

4. Data and methods

In collecting data it was essential to have whole texts instead of isolated phrases, as the phenomenon in focus is on the clausal and even textual level. It has to be clear, in what kind of temporal and aspectual context the studied examples occur. Object case alternation is part of the core and in any type of text a great deal of data for the phenomenon under analysis can be found. The data of this work are four fiction novels and their translations from Finnish into Lithuanian. I used the novels Manillakövsi and Everstin autonkuljettaja by Veijo Meri, Jäniksen vuosi by Arto Paasilinna, and Kaksi rakkautta by Maila Talvio along with their translations (Meri 1983, 1994, 2004; Paasilinna 2000a, 2000b, Talvio 1994, 1937). The process of translating from one language into another may have an effect on the target language, also in grammatical constructions (Gellerstam 1996: 56-58). This has to be taken into account when comparing syntactic structures. The potential effect of the source language is most often assimilative, but in this study, the most important arguments are drawn from the differences, not from the similarities. At the moment, unfortunately, there doesn't exist any complete texts translated from Lithuanian into Finnish³. In the future, when there will be translations also from Lithuanian into Finnish, it will be interesting to conduct comparative research of these grammatical correlates and determine what this brings to the picture.

I collected all the clauses that have an object both in the original novel and the Lithuanian translation and compared the case marking in them. I have divided the data into three groups, according to whether the case opposition refers to aspect, quantity of the object, or negation. Then I have selected minimal pairs from each group, in order to find examples where all other factors are absent, to be able to compare only the phenomenon in question. This enables me to analyse the case alternation convincingly. Both in Finnish and in Lithuanian the partial case is dominant, so if any of the factors hold, the object case is partial. This study is a qualitative study, that is, my aim here is to analyse the semantic categories of object case alternation and to present examples of the categorical correspondences in these two languages.

5. Differences and similarities between Finnish and Lithuanian

This section is divided into three subsections, each of which present analyses of data in terms of one broad semantic category that is linked to the object case alternation: aspect (5.1.), which is divided into lexical aspect (5.1.1.) and grammatical aspect (5.1.2.), quantitative definiteness of the object (5.2.), and negation (5.3.).

5.1. Aspect

The best known difference between Finnish and Lithuanian object case alternation is that, in Finnish, it is highly aspectual, unlike in Lithuanian (Klaas 1999: 50–51). Lithuanian has a covering verbal prefix system to express aspectuality, in some cases also derivational means⁴. In Lithuanian the basic pattern is that a simple verb is inherently imperfective and a verb with a prefix is perfective. A clause in imperfective aspect is without a prefix, *aš valgiau obuolį* 'I was eating an/the apple', while in perfective clauses it appears with a prefix: *aš pavalgiau obuolį* 'I ate up an/the apple'. In Finnish a clause in imperfective aspect is with a partitive object: *söin omenaa*, 'I was eating an apple', and in perfective with a total object, *söin omenan*, 'I ate up an/ the apple'.

^{3.} Exception: There are Lithuanian novels translated into Finnish, but not directly, only via Russian: Ričardas Gavelis: Nuoren miehen muistelmat (1995, orig. Lith. Jauno žmogaus memuarai, 'The memoirs of a young man') and Romualdas Granauskas: Elämää vaahteran alla (1990, orig. Lith. Gyvenimas po klevu, 'Life under a maple tree'), both translated from Russian into Finnish by Ulla-Riitta Heino.

^{4.} For instance, verbs whose prefix forms an inherent part of its lexical meaning, as the prefix at- in atleisti 'to dismiss', a means of "secondary imperfectisation" can have the suffix -inė-: atleidinėti, which makes the meaning iterative 'to dismiss repeatedly' (Ambrazas & al. 1997: 237).

In 5.1.1., I will analyse clauses with verbs that have restricted aspectual properties. They are more or less confined to either imperfectivity or perfectivity, based on their semantic properties. In Finnish, verbs typically express some kind of a dynamic state, such as emotions: *rakastaa* 'to love', *pelätä* 'to fear', back-and-forth movement: *ravistaa* 'to shake', *heiluttaa* 'to wave', and also punctual events that have no categorical change, such as *halata* 'to hug', *lyödä* ' to hit', and *tönäistä* 'to poke' (Pajunen 2001: 44). At the other end there are verbs that are aspectually restricted to perfectivity, typically verbs denoting a sudden and drastic change, such as *löytää* 'to find', *menettää* 'to lose', *tappaa* 'to kill' (Pajunen 2001: 45). In the middle there are verbs that are inherently not confined to any aspect but can be viewed differently depending on the clausal or grammatical aspect. In 5.1.2., I will analyse verbs that are aspectually flexible.

5.1.1. Lexical aspect

Both in Finnish and Lithuanian there are semantically characterised groups of transitive verbs that take a partial object. Semantically they are typically mental states and extremely irresultative in a way that the subject person has little or no effect on the end result of the situation, such as 'to fear', 'to wait', 'to want', and 'to look for'. When analysed as semantic roles, the subject person is more of an experiencer than an agent, and the object's semantic role is rather stimulus than patient. Lithuanian these verb groups are semantically defined and analysed in the same way: they express a strong, typically emotional, orientation towards something, but in a way where the experiencer has little or no power over the result of the event (Ambrazas 2007: 245; Valeckienė 1998: 35–36). In other words, they are irresultative. Consider the following examples from the data:

(1a) Finnish (Paasilinna 2000a: 125)

Jänis säikäht-i **kohina-a** *ympärillä-än.* rabbit be.startled-3SG.PAST **noise-PART** around-POSS 'The rabbit was startled by the noise around it.'

Zuikis	išsigand-o	triukšm-o.
rabbit	be.starteled-3P.PAST	noise-GEN.
'The rabbit	t was startled by the noise.'	

(2a) Finnish (Paasilinna 2000a: 78)

hän	ets-i	katsee-lla-an	jänis-tä
he	search-PAST.3SG	gaze-ADE-POSS	rabbit-PART
'He le	ooked for the rabbit	t with his eyes.'	

(2b) Lithuanian (Paasilinna 2000b: 58)

žvilgsn-iu	jis	ieško-jo	zuiki-o
gaze-INSTR	he	search-PAST.3SG	rabbit-GEN
'He looked f	or the r	abbit with his eyes.'	

(3a) Finnish (Paasilinna 2000a: 16)

Jänis	kiinnost-i	hei-tä	kovasti.
rabbit	interest-3SG.PAST	they-PART	strongly
'The rab	bit interested them v	ery much.'	

(3b) Lithuanian (Paasilinna 2000b: 13)

Zuikis	juos	labai	su-domin-o.	
rabbit	they.ACC	strongly	PFV-interest-3P.PAST	
'The rabbit interested them very much.'				

In (1) and (2), the verbs 'to be frightened' and 'to look for' are typical irresultative verbs and belong to the core of the irresultativity, which in both languages take a partial object case. In (3), the original clause and its translation behave differently in these two languages. In Lithuanian, the group of verbs taking only partial case is much smaller than in Finnish, as in Finnish the extreme irresultative verbs are not the only verbs restricted to taking a partial object but also most verbs denoting cognitive states (see also Klaas 1996: 43; 1999: 76). In (3a), the Finnish verb *kiinnostaa* 'to interest someone' is such a verb, and always takes a partial case. Its equivalent in Lithuanian (*su*)*dominti* in (3b) belongs to the main group: the verbs taking an accusative object.

Regarding the semantic groups that take genitive objects in Lithuanian, see Ambrazas & al. 1997: 503.

Even though no examples were found where a verb in Lithuanian would require a partial object but in Finnish it could not take a partitive object, there are occasions, where there is variation in object case in Finnish but not in Lithuanian. See the following examples in (4):

(4a) Finnish (Meri 1983: 77)

[Hän]	vaat-i	avioero-a
He	demand-PAST.3SG	divorce-PART
'He dema	nded a divorce.'	

(4b) Lithuanian (Meri 1994: 173)

[Jis]	pa-reikalav-o	ištuok-os.
He	PFV-demand-PAST.3SG	divorce-GEN
'He dema	nded a divorce.'	

(5a) Finnish (Meri 1983: 77)

Se	rouva	vaat-i	elatusavu-n.
That	wife	demand-PAST.3SG	alimony-TOT
'The w	vife deman	ded alimony.'	-

(5b) Lithuanian (Meri 1994: 173)

Žmona *iš jo reikalav-o aliment-ų.* Wife from him demand-PAST.3SG almony-GEN 'The wife demanded alimony from him.'

The verb 'to demand' refers to the act of asking someone else for something convincingly in order to get it for oneself, which implies an aspiration of that something but not necessarily the power over the result of demanding it. In Finnish, the verb *vaatia* is ambivalent and can have either partitive or total object case, as is seen in the examples. In (4), the object is in a partial case but in (5), it is in a total case. In Lithuanian, the verb *reikalauti* is of those which take a partial object. Lithuanian might be stricter with its rule of partial object with certain verbs, as the bond between a verb and an object case is more of a relic and does not reflect any productive semantic motivation in contemporary language. Klaas (1996: 43) mentioned too, that with verbs such as 'to want', which in Estonian and Lithuanian take a partial object quite strictly, Finnish allows also a total object. Klaas (1996: 44) gives an example with a total object: Petteri haluaa uuden asunnon 'Peter wants a new apartment', and in this data an example with a partial object Se tahtoo autoa (Meri 2004: 75) 'He wants a car'. In both cases, the Lithuanian variant is with a partial object: Petras nori naujo buto (Klaas 1996: 43) and Jis nori automobilio (Meri 1994: 111). Finnish seems to allow more variation, as the object case expresses an aspectual point of view, which can vary according to the speaker and/or the situation (see also Klaas 1996: 43–44). In Finnish, object case alternation for this type of verb moves towards grammatical case alternation and also towards the question of whether the result of the event is seen as being relevant or not. This is in accord with the assumption, that in Finnish, object case alternation is relatively productive. In order to determine the extent of variation in different languages and across different eras, it would be fruitful to examine this point with the help of frequency studies of larger corpora.

In the other extreme there are verbs that are semantically more or less restricted to the perfective aspect. See example (6).

(6a) Finnish (Meri 2004: 5)

Joose	Keppilä	löys-i	köyde-n
Joose	Keppilä	find-3P.PAST	горе-ТОТ
keske-ltä	huolte	otie-tä.	
middle-ABL	servic	e road -PART	
'Joose Kepp	pilä found a	rope in the mic	Idle of the service road.

(6b) Lithuanian (Meri 1994: 5)

Josė Kepilia front-e ant kelio rad-o virvut-ę. Joose Keppilä front-LOC on road-GEN find-3P.PAST **rope-ACC** 'Joose Keppilä found a rope on the road at the front.'

In (6), the verb Finn *löytää*, Lith *rasti* 'to find' is a typical example of the verbs that, by their semantic criterion, can only form a perfective clause. Therefore they can only take a partial object, if the quantity of the object is indefinite or the clause is negated.

In Lithuanian, this kind of lexical alternation is not explained as aspectual but as a historical relic that has lost its semantic content (Ambrazas 2007: 244-245; Schmalstieg 1987: 193). Nevertheless, it clearly shows the same kind of pattern as found in Finnish lexical aspectuality with the semantic groups involved being aspectually specific. Apparently, in earlier centuries, Lithuanian case alternation expressed that kind of aspectuality more widely and more clearly. Historical texts show that earlier there were more verbs taking genitive case than there are in contemporary Lithuanian. Those verbs have gone through a reanalysis and they have started to take accusative for their object case, analogically to other transitive verbs (Schmalstieg 1987: 192; Ambrazas 2007: 223). Such verbs are, for example, atminti 'to remember', užmiršti 'to forget', mylėti 'to love', and žinoti 'to know' (Palionis 1995: 63-64). Interestingly, only one of them, 'to love' is a partitive verb in contemporary Finnish, so the notion of aspect apparently has not been very uniform.

5.1.2. Grammatical aspect

Verbs that are not inherently restricted to any aspectual opposite, can be either imperfective or perfective, depending on the reference and discourse position, which I refer to here as grammatical aspect. The verbs here refer to an event that may be seen either as on-going or as a whole (*I was writing a letter / I wrote a letter*), or in a sense that the situation is seen as a whole, but there may or may not have been a categorical change (*I shot at a bird / I shot down a bird*) (Larjavaara 1991: 388). These verbs have different meanings, typically referring to various kinds of working and making, such as 'to read', 'to clean', and 'to construct'. In Lithuanian, there is no case alternation in grammatical aspect, because the grammatical aspect is expressed with prefixes, so all the objects in Lithuanian are accusative. See examples (7–9):

Kyllä sinä jaksa-t kanta-a vasika-n. Yes you manage-2SG.PRES carry-INF **calf-TOT** 'You will manage to carry the calf.' (7b) Lithuanian (Paasilinna 2000b: 50)

Tutikraipa-jėg-s-ineš-tiveršel-į.youreallyPFV-manage-FUT-2SGcarry-INFcalf-ACC'Youreally will manage to carry the calf.'

(8a) Finnish (Meri 1983: 5)

Yksi tek-i jo-ta-in, toinen do-3SG.PAST something-PART other one hammasratas-ta syli-ssä-än kant-oi carry-3SG.PAST gear-SG.PART lap-INE-POSS.3P 'One was doing something, the other was carrying a gear in his arms.'

(8b) Lithuanian (Meri 1994: 117)

Vienas	kažk-ą	dar-ė,
one	something-ACC	do-3p.past
antras	neš-ė	dantrači-us
other	carry-3P.PAST	gear-PL.ACC
'One was o	doing something, t	he other was carrying a gear.'

Examples (7) and (8) have the same verb Finn *kantaa*, Lith *nešti* 'to carry' but they differ from each other in aspect. The clause in (7) is perfective, it refers to a certain length that the calf has to be carried from one point to another. The clause in (8), on the contrary, is imperfective, it describes a state of affairs – what is going on, who is doing what – without a beginning or any goal to be reached. In Lithuanian, both sentences have an accusative object. Perfective aspect in (7b) is expressed by a prefix pa-. In Finnish, the perfective sentence has a total object and the imperfective sentence has a partitive object, and that is the only grammatical mark of the aspect opposition. This kind of aspectual case alternation within the use of the same verb lexeme is the main difference between object case alternation in Finnish and Lithuanian.

There were occasions in the data where an intrinsically imperfective verb was used in a perfective clause, also in Lithuanian. In the earlier example (2), the verb 'to look for' was in its normal aspectual position and now compare it with the following example (9):

⁽⁷a) Finnish (Paasilinna 2000a: 68)

MAIJA TERVOLA

(9a) Finnish (Talvio 1937: 27)

Elinaets-imuistiinpanokirja-n.Elinasearch-3SG.PASTnotepad-TOT'Elina searched out a note pad.'

(9b) Lithuanian (Talvio 1994: 35)

Elina su-ieško-jo užrašų knygut-ę. Elina PFV-search-3P.PAST note-PL.GEN **book-**ACC 'Elina searched out a note pad.'

In (2), the verb etsiä (f.), ieškoti (l.) 'to look for' is used imperfectively, which is the common use of that verb. In Finnish, the object is in partitive, and in Lithuanian, there is no prefix. In (9), the same verb is being coerced into a perfective use, where in Finnish there is now a total object. The meaning of the verbs now covers also the result, it includes not only looking for something but also finding it. As example (9) shows, in Lithuanian it is possible to use intrinsically imperfective verbs also perfectively, by adding a perfective prefix. Interestingly the object case changes into an accusative, as it does in Finnish. The object case varies among the aspectual properties of the sentence, not the verb lexeme used in the sentence, and the object case alternation reflects fully with the common aspect system expressed with prefixes. Ambrazas & al. say that "[t]he objective genitive is obligatorily governed" by the given groups of verbs and Ambrazas & al. do not give an example of such a perfective use of these verbs (Ambrazas 6 al. 1997: 503). There is a possibility, that this kind of coercion is the result of the influence of the original text in translation; however, similar cases can also be found on the Internet. Therefore comparison of this phenomenon needs further research utilizing statistical data. All the same, this is a clear example of Lithuanian object case participating in grammatical aspect alternation.

Another trace of grammatical aspect case alternation is found in dialects in Eastern Lithuania. Jonas Šukys (1998) mentions that especially in the Aukštaitian dialect it is sometimes possible to vary the object case according to whether the act is seen as permanent or temporary, as in *duok man peili*, 'give me the knife', where *peili* 'the knife' is in accusative, versus *duok man peilio*, where *peilio* is in genitive (Šukys 1998: 107). The accusative refers to a permanent change: the knife will be in my possession after the act, and the genitive refers to a temporary change: the knife will be returned after the act. This is not analyzed as aspectual alternation by Šukys, but seen in the context

of aspect, it is consistent with the phenomenon as a whole.

5.2. Quantity of the object

It is well known, that both in Finnish and in Lithuanian the object case alternates according to the quantity of the NP itself, which holds not only for objects but also for subjects (ISK § 1421; Ambrazas & al. 1997: 655). This concerns only divisible nouns, that is, nouns that are either plural or mass nouns. If the object is of indefinite amount, it is marked with a partial case in both languages. See examples (10) and (11).

(10a) Finnish (Meri 1983: 35)

Hae-taan	nä-itä	kiv-iä	lisää
get-PASS.PRES	these-PART	stone-PL.PART	more
'Let's get more	e of these stone	es.'	

(10b) Lithuanian (Meri 1994: 140)

At-neš-ki-me	akmen-ų	dar
PERF-carry-IMP-1PL	stone-PL.GEN	more
'Let's bring more stones	s.'	

(11a) Finnish (Meri 2004: 36)

Lähett-i	Ville-poja-lle	raha-a
send-PAST.3SG	Ville-boy-ADE	money-PART
'[He] sent money to	o Ville boy.'	

(11b) Lithuanian (Meri 1994: 26)

Nu-siunt-ė	Vile-i	pinig-ų
PFV-send-PAST.3P	Ville-DAT	money-GEN
'[He] sent money to	o Ville.'	

In (10) and (11), the clause is aspectually perfective. In (10), the clause refers to an event in the future and, in (11), in the past. These events are seen as whole and completed, only the quantity of the object (stones, money) is open and indefinite. In both languages there is thus a partial object. Perfective aspect can be seen in Lithuanian verbal prefixes. In Finnish, there is no formal marking of aspect, as the object case is ambiguous: the same case can refer to verbal or nominal aspect and can be determined only by the context and discourse position. Here, the translator has interpreted the situations to be of perfective aspect, and the Finnish partitive as referring to the indefinite quantity of the object.

It is also possible to find typical divisible entities marked with the total case in both the original and translation. See example (12).

(12a) Finnish (Meri 1983: 157)

Peltola	jo-i	kylmä-n	kahvi-nsa.
Peltola	drink-PAST.3SG	cold-TOT	coffee-TOT.POSS
'Peltola d	rank up his cold cot	ffee.'	

(12b) Lithuanian (Meri 1994: 235)

Peltola	iš-gėr-ė	savo	atšalusi-ą	kav-ą.
Peltola	PFV-drink-3P.PAST	his	cooled-ACC	coffee-ACC
'Peltola d	lrank up his coole	d dowr	n coffee.'	

Here 'coffee' is a typical mass noun and it is presented as bounded in context. The object refers to all coffee that is left in this person's cup, and is thus marked by a total object case in both languages.

Sometimes different object marking can be found in these languages with a typical divisible entity. Consider the following examples:

(13a) Finnish (Meri 1983: 140)

Vet-tähänjo-ikraana-sta.water-PARThedrink-3SG.PASTtap-ELA'Water he drank from the tap.'tap-ELA

(13b) Lithuanian (Meri 1994: 222)

Vanden-iger-etiesiaiiščiaup-o.water-ACCdrink-3P.PASTstraightfromtap-GEN'Water he drank straight from the tap.'

(14a) Finnish (Talvio 1937: 173)

Syö-Ø-kö	teidän	hevose-nne	sokeri-a?
eat-3SG.PRES-Q	your	horse-POSS.2PL	sugar-PART
'Does your horse	e eat sugar	?'	

(14b) Lithuanian (Talvio 1994: 119)

Ar	jūsų	arklys	ed-a	cukr-ų?
Q	your	horse	eat-3P.PRES	sugar-ACC
'Doe	s your hors	se eat sugar?'		

In (13) and (14), the original Finnish clause has a partitive object but it is translated with the accusative in Lithuanian, even though the objects refer to a typical divisible entity, are not quantitatively bounded, and aspect is imperfective, unlike in (12). In these types of sentences the quantity of the object is not definite but also not exactly indefinite. Actually, the clause does not refer to any actual situation, rather it describes a general state of affairs and tells what is possible or typical for this individual person or animal. The partial case seems to refer more to just the quality of the object, not to its quantity at all, and the quantity of the object NP can be seen as neutral. This different case marking in this type of generic clause in these two languages offers an analysis, that the neutral or general variant of the quantity of the NP has a different status in these languages. In Finnish, the neutral variant coincides with indefinite quantity and is marked with the partitive case, while in Lithuanian the neutral variant seems to fall into the same morphosyntactic category as the definite quantity of the object, as it is marked with the same case - the accusative. According to Šukys (1998: 105), in Lithuanian the genitive emphasises the quantity of the object referent instead of the quality. Table 1 gives an overall view of this difference.

	Indefinite quantity	Neutral	Definite quantity
Finnish	Partitive: Join kahvi a .		Total: <i>Join kahvin.</i>
Lithuanian	Genitive: <i>Aš geriau kavos.</i>	Accusative: <i>Aš geriau kavą</i> .	

Table 1. Object case depending on the quantity of the object for the sentence 'I drank coffee' in Finnish and Lithuanian.

A conclusion can be drawn, that the marked variant in Finnish is the definite quantity and there has to be a specific emphasis to a definite quantity when using the accusative case, while in Lithuanian the accusative is the neutral variant, and the genitive is used only to emphasise the indefinite quantity. There seems, thus, to be a difference in the category of quantity between these languages.

5.3. Negation

In both languages, negation changes the object case. The object of a negated verb is in partial case in both languages, that is partitive in Finnish and genitive in Lithuanian. See (15) and (16):

(15a) Finnish (Meri 2004: 23)

Minä en koskaan jätä kaveri-a pula-an. I NEG.1SG ever leave.PRES **friend-PART** trouble-ILL 'I will never leave a friend in trouble.'

(15b) Lithuanian (Meri 1994: 16)

Aš niekada ne-pa-lik-s-iu **draug-o** bėdo-je. I never NEG-PFV-leave-FUT-1SG **friend-GEN** trouble-LOC 'I will never leave a friend in trouble.'

(16a) Finnish (Meri 2004: 86)

Pataljoonankomentaja-aeitavat-tuBattalion commander-PARTNEGmeet-PAST.PASS'[The] Battalion commander was not met'

(16ł) Lithua	nian (Meri 1	.994: 58)		
	Battalic			-	G-more-meet-PAST.3P
(17a	a) Finnis	h (Talvio 193	7: 102)		
	he	NEG.3SG	<i>kehoitta-nut</i> urge-PAST nend to buy it [it.PART	<i>osta-maan</i> buy-INF
(17t) Lithua	nian (Talvio	1994: 78)		
	he		enduo-ja mend-3P.PRES mend to buy tl	<i>pirk-ti</i> buy-INF he estate.'	<i>dvar-o</i> . estate-GEN

Examples (15)–(17) show the typical case of negation, (15) is an active clause, (16) is a passive clause, and (17) is an active complex verb phrase. The clauses are aspectually perfective and the object referent is a typical indivisible entity, a human in (15) and (16), a house in (17). These clauses contain a negated verb phrase, which is the socalled standard negation or clausal negation (Dahl 2010: 10–11), and both have a partial object case. In (17), there is a complex verb phrase where the finite verb is negated and its companion infinitive verb has an object.

In some clauses with standard negation there is a different object case in Finnish and Lithuanian. Consider examples (18) and (19).

(18a) Finnish (Meri 1983: 18)

joka	ei	uskalla-Ø	tul-la	korjaa-maan
who	NEG.3sg	dare-PRES	come-INF	gather-INF
käytetty-	-jä a	stio-ita	pöyd-i-s	stä.
used-PL.	PART d	ish-PL.PART	table-PL-	ELA
'who c tables.'	loesn't dare	to come to g	gather the u	sed dishes from the

(18b) Lithuanian (Meri 1994: 127)

kuris ne-si-rvžt-a išei-ti nuo who **NEG-REFL**-dare-3P PRES leave-INF from stal-u su-rink-ti nešvari-us ind-us table-PL.GEN PFV-gather-INF dirty-PL.ACC dish-PL.ACC ...who doesn't dare to come to gather the dirty dishes from the tables.'

(19a) Finnish (Talvio 1937: 123)

en	oll-ut	tottunut	näke-mään	
NEG.1sg	be-PAST	used.to-PTCP.PAST	see-INF	
isä-ä mielenliikutukse-ssa				
father-PART rush.of.emotions-INE				
'I wasn't used to seeing father in a rush of emotions.'				

(19b) Lithuanian (Talvio 1994: 89)

ne-buv-au	prat-us	si	maty-ti
NEG-be-1SG.PA	ST used.to-	-PTCP.past	see-INF
tev-ą	toki-os	būsen-os	
father-ACC	such-GEN	state-GEN	
'I wasn't used	to seeing fath	ner in such a s	state of mind.'

In Finnish there is a partitive case in both (18) and (19), as expected, but in the Lithuanian translations, the object case is accusative not genitive. The difference seems to be, that (18) and (19) have relatively complex verb phrases. The first verb, the finite one, is negated, and after that there are two more infinitive or participle verbs, the last of which has an NP as an object. The long distance between the negated verb and the object seems to cause different case marking in these languages. In Finnish, the negation still affects the object case and turns it into a partial object in spite of the long distance. In Lithuanian, the object case remains accusative, which is the same as it would be in an equivalent affirmative sentence. It appears that in Lithuanian, negation loses its power over such a long distance between the negated verb and the object.

In addition to clauses with standard negation, there are clauses that are formally affirmative but contain lexical items with a negative meaning. This is the so called negative polarity (ISK § 1615; Dahl 2010: 30). For example, there are verbs with a negative meaning, e.g. Finn *kieltäytyä*, Lith *atsisakyti* 'to refuse' (example 20) and adjectives Finn *vaikea*, Lith *sunku* 'hard' in (21). Consider the following examples:

(20a) Finnish (Meri 1983: 123)

kirkko	kieltäyty-i	vihki-mä-stä	hän-tä
church	refuse- PAST.3SG	marry-INF-ELA	he-PART
'The chu	rch refused to marry	him.'	

(20b) Lithuanian (Meri 1994: 209)

jį atsisak-ė sutuok-ti. **he.ACC** refused-3P.PAST marry-INF '[They] refused to marry him.'

(21a) Finnish (Talvio 1937: 99)

Vaikea	ol-i	sitä	lähettä-ä.
hard	be-PAST.3SG	it.PART	send-INF
'It was ha	rd to send it [the	visiting care	1].'

(21b) Lithuanian (Talvio 1994: 76)

buv-o	sunku	ją	iš-siųs-ti.
be-3P.PAST	hard	it.ACC	PFV-send-INF
'It was hard	to send it.'		

In examples (20) and (21), the clauses are formally affirmative, but not necessarily semantically so. In Finnish, the object case is partitive, while in Lithuanian, it is accusative. The negative polarity items seem to have a different impact on the object case in these two languages. Mere semantic negation affects the object case in Finnish but not in Lithuanian. As Vilkuna (2000: 120) puts it, in Finnish the interpretation is essential in negation, when it comes to the object case. In Lithuanian, the object case remains the same as in an equivalent affirmative clause. It looks like in Lithuanian the negative prefix *ne*- plays a crucial role as a factor of the object case. Therefore we could say, that in Lithuanian, negation operates on the formal level, while in Finnish, it operates on the semantic level. In Lithuanian, the negative prefix *ne*- can be attached not just to the verb phrase but to other parts of the clause as well, the function of which is to focus the negation to another part of the clause. According to Ambrazas & al. (1997: 667) in Lithuanian, in these kinds of clauses, the object case remains accusative. In Finnish, the negative auxiliary *e*- cannot be attached to any specific parts of the clause, but there are other means, such as word order, to emphasise which part of the clause is being denied (ISK § 1618). Consider the following examples:

(22a) Finnish (Meri 2004: 66)

E-tte	kai	te	ole	otta-neet
NEG-2PL	perhaps	you	be	take-PL.PTCP
tästä	yh-tä		kortti	-a ?
here-ELA	one-P	ART	card-I	PART
'Haven't y	ou taken	one ca	rd from l	nere?'

(22b) Lithuanian (Meri 1994: 45)

Artiknejūspa-ėm-ė-teQonlyNEGyouPFV-take-PAST-2PLvien-qkort-q?one-ACCcard-ACC'Was it not you who took one card here?'

(23a) Finnish (Meri 1983: 107)

Kansallissosialismi-ahäneipitä-nytnational.socialism-PARTheNEG.3SGconsider-SG.PASTenäämahdollise-na.longerpossible-ESS'National socialism he no longer considered possible.'

(23b) Lithuanian (Meri 1994: 196)

Nacionalsocialism-qlaik-ėjaunational socialism-ACCconsider-3P.PASTalreadyne-be-galim-ą.NEG-longer-possible-ACC'National socialism he no longer considered possible.'

In (22) and (23), in Lithuanian, the negation prefix is not connected to the verb phrase, in (22), it is an isolated particle and emphasises the noun phrase $j\bar{u}s$ 'you' and in (23), it is connected to the adjective phrase galima 'possible', and as we see, the object case remains accusative. In Finnish, standard negation always works through the verb, regardless of which part of the sentence is being emphasised.

In (23), the Finnish verb *pitää* is a partitive verb and would take a partitive object also in an affirmative clause, so the partial object is overlapping here and does not say anything about the effect of negation. This example still shows that in Lithuanian, negation does not affect the object case if a noun phrase is negated. According to Ambrazas et al. (1997: 669) it is the finite verb of the clause that has to be negated to be able to affect the object case, as in Tėvai mus mokė netingėti 'Parents taught us not to laze' versus Tėvai mūsų nemokė tingeti 'Parents didn't teach us to laze', where only in the latter clause the object ($m\bar{u}su$ 'us') is in the genitive case, while the former has taken an accusative object (mus). In Finnish, morphological negation alone does not necessarily turn the object case into partitive, and conversely, a morphologically affirmative clause may have a negated interpretation and thus the object case is not necessarily in the partitive. This can be seen in Eiköhän pidettäisi pieni tauko 'Shouldn't we take a small break', where *pieni tauko* 'small break' is a total object in spite of the auxiliary e- at the beginning of the clause (Vilkuna 2000: 120; ISK § 1638).

6. Conclusion

In the previous section I have presented a more elaborate picture of some object case alternation patterns of Finnish and Lithuanian. The basic differences and similarities between Finnish and Lithuanian object case marking have been generally known for some time (Klaas 1999; Koptjevskaja-Tamm & Wälchli 2001; Larsson 1984; 2001). Earlier studies give a rough picture with more similarities than differences. This study has examined the phenomenon in more detail, revealing many more differences. In this section I will describe the contribution of this paper to that earlier picture.

The comparison of these languages in terms of quantitative definiteness of the object, or the so-called nominal aspect, revealed some differences in the concept of quantity in these languages. In most typical cases, with typical divisible entities of indefinite quantity the object case is partial in both languages. The differences were found in generic clauses, where the object is a typical divisible entity but the quantity was neither definite nor indefinite but rather neutral. The object seemed to refer only to the quality of the object referent, not to the quantity. That being said, for the neutral variant, where the quantity is not relevant, the object marking was different in these two languages. In Finnish, the neutral variant coincides with the indefinite quantity and is marked with a partitive, while in Lithuanian, it is marked with the definite quantity seems to be the marked variant, while in Lithuanian, the marked variant is the indefinite quantity.

Another well-known factor in object case alternation – negation – affects the object case in these two languages in a slightly different way. In Finnish, semantic negation is essential, which consists of not only standard or clausal negation but also of negation polarity items. In Lithuanian, only standard negation affects object case. There was also a difference in complex verb phrases regarding the extent to which the distance between the negated finite verb and its object matters and also whether this allows the object to change into a partial case form. In Finnish, even three verbs did not break the tie between the negated verb and its object, but in Lithuanian, the maximum distance in this data was two verbs. If the verb chain consists of three verbs, the object case remains accusative.

Further light was cast on the most familiar difference between these languages, the marking of aspect, with the addition of some more precision definitions. Although in Lithuanian aspect is marked systematically with prefixes, there are situations where the object case clearly follows the aspectual differences of the clause. For instance, core irresultative verbs such as 'to fear', 'to wait', 'to look for', also taking only partial object in Lithuanian, may be coerced into the perfective aspect, which can be seen both in the prefixation and the change of object case (see examples (2) and (9)). The aspectual features of Lithuanian case alternation can be considered in harmony with the assumption that the Finnic partitive and the Baltic genitive have a similar history as a local case changing into an abstract structural case with the same kind of potential meaning.

When comparing with other eastern Circum-Baltic languages, we can see that Finnish and Estonian have the same kind of system where the aspect is expressed with the object case, while Baltic and Slavic languages have a more grammaticalised analytic prefixation system for aspect (Metuzāle-Kangere & Boiko 2001: 486; Koptjevskaja-Tamm & Wälchli 2001: 654). However, in Estonian, object case alone is no longer always sufficient to express perfective aspect, instead requiring an extra particle *ära* to mark perfective aspect. This is equivalent to English up, as in Tüdruk sõi supi ära 'The girl ate up the soup' (Klaas 1996: 41; 1999: 50). Estonian seems thus to be moving towards an analytic type of construction, while Finnish is left with the older synthetic type (Klaas 1996: 43; 1999: 52). There is also one way Estonian is closer to the Lithuanian type than Finnish. The group of verbs taking a partial object is much larger in Estonian and Finnish than in Lithuanian. This is the case in Estonian, even more so than in Finnish. For instance, the verb 'to want' takes a partial object in Estonian and Lithuanian, while in Finnish the total object is also acceptable (Klaas 1999: 67–68; this article examples (4) and (5)). Also, some of the so called quasi-resultative verbs, 'to know', to feel', and 'to believe' in Finnish take a total object case, but in Estonian they take partitive (Klaas 1999: 61). What is common to all of these three languages is a core of extremely irresultative verbs denoting intentional orientation and emotional or intellectual cognition that take partial object in all these languages (Klaas 1999: 64). In Latvian and Polish, the use of genitive as an object case is even more reduced than in Lithuanian: only negated verbs and some rare exceptions in affirmative clauses have held onto the genitive (Koptjevskaja-Tamm & Wälchli 2001: 653). When it comes to the negation and quantity of the object, these factors affect the object case also in Russian and Polish (Koptjevskaja-Tamm & Wälchli 2001: 655).

The concept of transitivity has often been lifted up as a common factor for object case alternation in Finnish (Hopper & Thompson 1980: 262; Lazard: 2001: 884; Helasvuo 1996: 22). As Hopper and Thompson (1980) suggest in their famous paper, transitivity is defined

here as a gradual property of a verb or a clause. It consists of several components that build up the concept of transitivity, which can vary across different languages and in different cases within languages. All semantic categories that have been examined here can be found in the notion of transitivity described by Hopper and Thompson (1980: 252). The relevant components are: number of participants, kinesis (action), aspect, affirmation, affectedness of the object, and individuation of the object, all of which are essential for the object case alternation in Finnish and Lithuanian. The fact that there is more than one participant, is the requirement for the syntactically transitive sentence: it has both subject and object. Kinesis, whether or not there is action in the situation, is essential to the lexical aspect in Finnish and to some extent in Lithuanian, too: those verbs that refer to a state behave differently when it comes to the object case than those which refer to an action. Aspect is one of the main semantic oppositions expressed by the object case alternation in Finnish, and affirmation - versus negation is the category that affects object case in both languages. Affectedness of object and individuation of object are seen in the quantity to what extent the object is covered by the action, and if the object is divisible, how the divided amount is individuated – is it definite or indefinite.

To describe the connection between object, object case and semantic transitivity in Finnish, one can even make a simplified continuum. At one end the semantic transitivity of the situation is zero and there is no object but some other constituent, in the middle the degree of transitivity is medium and there is a partitive object in the sentence, and at the other end the transitivity is high and there is a total object in the sentence. This continuum is described graphically in Figure 1.

Intransitivity	Low transitivity	Medium transitivity	High transitivity
No NP	Other NP	Partitive object	Total object
Talo on	Minä pidän	Minä maalasin	Minä maalasin
valkoinen.	talo-sta.	talo-a.	talo-n.
house is white	I like house-ELA	I painted house-PART	I painted house-ACC
'The house	'I like the house.'	'I was painting	'I painted the house.'
is white.'		the house.' /	
		'I painted some of the house.'	

Figure 1. Semantic transitivity and sentence structure in Finnish.

7. Discussion

In this section I will discuss what can be said about the relationship of the similarities and differences of the object case alternation in Finnish and Lithuanian.

The case alternation has its roots in a separative meaning of a case, which started to develop into a partial meaning, and has further developed into a more abstract meaning relating to transitivity, aspect, or unboundedness. This development is explained in detail, for example, by Larjavaara (1991: 378) and Schmalstieg (1987: 160). The situation in contemporary language is slightly different in Finnish and Lithuanian, the main difference being in aspectuality, which is conceptually subordinate to transitivity and unboundedness (Hopper & Thompson 1980). It is only natural, that in Finnic, where there has been no systematic aspect marking, the case alternation has developed to express it, as it was already expressing other components of the broad category of the transitivity. And as Baltic already had systematic means for expressing aspect, the case alternation could not develop to express that kind of general marker of the transitivity degree.

While in Finnish the partitive case has been expanding ever since it became aspectual in the Proto-Finnic era (Larjavaara 1991: 379-380), the Baltic genitive has been losing its ground as an object case to accusative (Ambrazas 2007: 219; Schmalstieg 1987: 163). This has been explained as a change in the notion of transitivity (Šukys 1998: 191; Palionis 1995: 63) and as a reanalysis of some ergative constructions as accusative (Schmalstieg 1987: 189-195). According to Schmalstieg (ibid.) an increasing number of constructions are analysed as transitive, but like in Finnish, the reduced transitivity is not expressed widely. At the same time, the genitive has become more clearly a structural case and lost some of its lexical content (Ambrazas 2007: 281). One sign of the expansion of the accusative case over genitive in Lithuanian can be found in Šukys' normative instructions for Lithuanian language users to remember to use the genitive case when needed (Šukys 1998: 197–198). He warns language users not to use the accusative in place of the genitive. This implies that for contemporary language users the genitive is not automatic as an object case and can be "forgotten", and therefore it can be suspected to still be losing ground to the accusative. As seen in Russian, the expansion of accusative, especially in negated phrases, has gone on for centuries (Krasovitsky et al. 2011: 588). What is interesting here is that – as Larjavaara points out – in some of Sweden's Sámi languages the development is surprisingly similar to that of Lithuanian (Larjavaara 1991: 380). There is a group of verbs which hold their ground against the expansion of accusative and have kept their partitive object case, and this group acts in a manner very similar to what is observed in Lithuanian: it consists of verbs such as 'to look for', 'to want', 'to hope', 'to wait', and so on (ibid.). It would be interesting in further studies to make comparisons of texts and their translations from different time periods to see, how these correlations may have changed, in light of the assumption that the case systems are changing in different directions.

There is a consensus about the existence of Baltic influence in Finnic languages. What has been under a debate, is the essence of this influence in terms of object case becoming a structural and aspectual case. The possible variants here are, that the development has happened according to universal patterns, which assume no influence whatsoever from one language to another. Another possibility is that the ancient contacts between Baltic and Finnic have led to these kind of case alternation patterns. If so, a question arises, what might have been the essence of this influence – is it more of a mutual convergence, a resonance, or an intervention. Larsson's view of Baltic influence relating to the rise of the Finnic aspectual partitive can be described as intervention (Larsson 1984; 2001). According to Larjavaara (1991) the semantic expansion of the Finnish partitive case can be fully explained based on the language's own development. Larjavaara's explanation could be described as resonance.

Hopper & Thompson argue, that some diachronic grammatical changes can be better understood in light of transitivity, as they suggest has happened in Russian, where the accusative has expanded at the expense of the genitive as an object case and reduction of the genitive correlates semantically with certain components of transitivity (Hopper & Thompson 1980: 279). The latter two redefinitions are in accordance with the notion that in Lithuanian the accusative is expanding over the genitive.

One reason why it has been difficult to find consensus regarding whether the aspectual object alternation in Finnic languages is Baltic influence or not, might be that the focus has been in the element itself, not the common patterns of borrowing grammatical features. As Larsson (2001: 246) points out, the similarities in object case marking cannot be a result of pure coincidence. On the other hand, it is very hard to find solid evidence of borrowing grammatical features, because it is hard to trace influence from one specific language to another (Appel & Muysken 2005: 153–154).

According to Bossong (1988: 158), grammatical change can be best understood in an areal and historical context. Also, universal patterns must be taken into account. Even though they cannot predict a grammatical change, they can set the direction, if any, towards which development is likely to go (Bossong 1988: 143). It is known, that "[i]*n a situation in which several languages have been spoken in the same area and mostly by the same people for a long time they may start converging*" (Appel & Muysken 2005: 154). Based on the fact that there have been vast bilingual areas in the Proto-Finnic era, it is likely, that this is what have happened to Baltic and Finnic. However, convincing evidence for the strong interpretation of Baltic influence might be impossible to find. As Appel & Muysken put it, "syntactic borrowing may take place as an internally motivated evolution (perhaps only superficially) going in the direction of the forms of another language" (2005: 162).

In the end the question is about, whether and to what extent the language we speak shapes our concepts and affects how we perceive reality. If we assume that hypothesis to be even somewhat correct, we might imagine that ancient speakers of Finnic and Baltic understood the partial cases of both languages referring to the same concepts of reduced transitivity, imperfectivity, and unboundedness, and as a consequence, those concepts might have begun to be seen as similar.

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Tiivistelmä

Maija Tervola

Tässä artikkelissa on vertailtu suomen ja liettuan objektin sijavaihtelua. Suomen totaali- ja partitiiviobjekti vaihtelevat osittain samojen semanttisten periaatteiden mukaan kuin liettuan akkusatiivi- ja genetiiviobjekti. Suomen ja liettuan objektin sijavaihtelun tunnetuista samankaltaisuuksista löytyi tarkemmassa tarkastelussa uusia eroja: kielto vaikuttaa objektin sijaan suomessa semanttisella tasolla, liettuassa taas morfologisella tasolla. Lisäksi suomessa pitkässäkin lauseessa kielto vaikuttaa objektin sijaan, liettuassa taas pitkä etäisyys kiellon ja objektin välillä mitätöi vaikutuksen. Objektin kvantitatiivisen määräisyyden suhteen neutraalit lauseet saavat suomessa partitiiviobjektin mutta liettuassa akkusatiiviobjektin. Aspekti vaikuttaa objektin sijaan suomessa systemaattisesti, kun taas liettuassa objektin sijavaihtelussa voi nähdä ainoastaan jälkiä aspektuaalisesta merkityksestä. Pääpiirteissään liettuassa objektin sijavaihtelu ilmaisee oppositiota transitiivisten ja muiden rakenteiden välillä, suomessa taas totaalisen ja eri tavoin vajaan transitiivisuuden välistä oppositiota.

Santrauka

Maija Tervola

Šiame straipsnyje buvo palygintas suomių ir lietuvių kalbų papildinio linksnių kaitaliojimas. Suomių kalbos totalinis papildinys kaitaliojasi su partityvu iš dalies pagal tokius pačius pricipus kaip lietuvių kalbos galininkas su kilmininku. Tarp suomių ir lietuvių kalbų jau ankščiau žinomų bendrumų per išsamesnį tyrimą rasta naujų ir smulkesnių skirtumų: neigimas įtakoja papildinio linksnį suomių kalboje semantiškai, o lietuviu kalboje morfologiškai. Be to, suomiu kalboje netgi ilgame sakinyje neigimas paveikia papildinio linksnį, o lietuvių kalboje ilgas atstumas tarp neigiamo veiksmažodžio ir papildinio anuliuoja neiginio poveikį į linksnį. Kas link papildinio neapibrežto kiekio reikšmės, neutralūs sakiniai suomių kalboje gauna partityvą, o lietuvių kalboje galininką. Veikslas paveikia papildinio linksnį suomių kalboje sistematiškai, o lietuvių kalboje papildinio linksniuose matyti tik pėdsakai nuo veikslinės reikšmės. Bendrais bruožais, lietuvių kalboje papildinio linksnių kaitaliojimas išreiškia priešpriešą tarp tranzityvinių ir kitų struktūrų, o suomių kalboje - priešpriešą tarp pilno ir įvairiais būdais sumažinto tranzityvumo.

MERLIJN DE SMIT Turku

Agented participles in Baltic and Finnic

1. Introduction

The subject of this article is the origin of the enigmatic agented -mA and -ttU participles in Finnic, and the development of the Finnic participial system as a whole, against the background of Finnic-Baltic contacts. The construction I am interested in is the following:

(1)	isä-n	anta-ma	lahja
	father-GEN	give-mA	present.NOM
"The present given by (the) father			ther"

While in (1) the participle is part of an attributive construction, it may occur in a manner similar to a periphrastic passive as well:

(2)	lahja	on	isä-n	antama
	present.NOM	is.3sg	father-GEN	give-mA
	"The present	was given b	y (the) father."	

I call this construction enigmatic for the following reasons: 1) it is spread very thinly in Finnic, occurring only in Finnish and, marginally, North Karelian (Ojajärvi 1950: 81, Koivisto 2005: 147), although a related abessive form, e.g. *tietä-mä-ttä* 'without my knowing', occurs in all varieties of Finnic (Laanest 1982: 248), 2); the construction nonetheless has cognates throughout the other Uralic languages, such as Saami and Mari (Häkkinen 1993: 133–135), pointing to deep historical origins; 3) aside from its marginality in terms of distribution, it is structurally marginal as well in Finnic: the construction occurs only with transitive verbs, and with an obligatory genitive agent (Koivisto

2005: 150). It may be used as a promotional passive in a language group which generally exhibits non-promotional passives only; and, particularly, 4) there are exact equivalents in the Baltic languages (Larsson 1996; 2001: 247–249), but contact explanations are complicated by the apparent high age of the Finnic construction.

The point is often overlooked that construction (1) co-occurs in Finnic with a very similar construction formed with the passive participial ending -ttU:

(3)	hiiren	syöty	leipä	
	mouse-GEN	eat-PTCP.PASS.PST	bread.NOM	
	"Bread eaten b	bread eaten by a mouse"		

This construction, in turn, occurs much more widely in Finnic, including Finnish dialects (Kettunen 1943: 147–148, Ojajärvi 1950: 83) and Old Finnish (Häkkinen 1993: 145). The obvious explanation would seem to be that this construction, which likewise has striking equivalents in the Baltic languages (Lavine 1999), pushed the *-mA* participle into its currently marginal position after the development of the diathetic participial endings *-ttU* and *-nUt* in Proto-Finnic (Häkkinen 1993: 144–145, Larsson 1996: 148, 150). Alternatively, Koivisto (2005: 169–170) argues that the *-mA* participle and the construction in which it occurs developed in much more recent times.

To properly evaluate such explanations, however, the emergence and preservation of constructions such as (1) and (2) needs to be seen in the context of the development of the Proto-Finnic verbal system as a whole, and the possible influence of Baltic on that verbal system (or vice versa). Constructions do not come into contact in isolation, but in the context of all their paradigmatic connections. Before trying to pinpoint the role of language contact, we thus need to look at what is known about the development of those paradigmatic connections.

In sections 2 and 3 below, I detail some aspects of the Proto-Finnic verbal system against its Uralic background and against the languages with which it is known to have been in contact. Section 4 deals in more detail with passives and the occurrence of genitive agents with passives in Finnic and Baltic. In section 5 I explore the possible role of Baltic contacts in the development of agented passives in Finnic, and in section 6 I present my conclusions.

2. From Pre-Finnic to Proto-Finnic

What, then, do we know about the development of the verbal system from Pre-Finnic to Proto-Finnic times? First, certain issues of definition have to be dealt with. Though the traditional Uralic family tree model has "Early Proto-Finnic" as the ancestor language of Saami and Finnic only as a relatively late stage, after the Finno-Volgaic, Finno-Permic and ultimately Finno-Ugric protolanguages, it is unclear whether there is any warrant for this assumption. In terms of phonology, almost all sound changes distinguishing Finnic from Proto-Uralic are reconstructed to the transitional phase between Early and Late Proto-Finnic, meaning that phonologically "Early Proto-Finnic" and Proto-Uralic are almost identical (Kallio 2006: 14-15). Related to this, recent research by Petri Kallio (2006) and Jaakko Häkkinen (2009) would seem to suggest that Proto-Uralic needs to be dated significantly more recently than has hitherto been the case. Significantly, Jaakko Häkkinen (2009: 24–25) argues that indisputable Proto-Indo-Iranian loanwords in Proto-Uralic mean that the break-up of the latter cannot be dated earlier than approx. 2000 BC. For this reason, I take "Pre-Finnic" to be broadly the same as "Proto-Uralic".

What happened in terms of the verbal system between Pre-Finnic and Proto-Finnic? First, voice opposition emerged. No voice opposition can be reconstructed to Pre-Finnic, which instead exhibited anaphoric object reference on the verb stem with the suffix *-se (Janhunen 1982: 35), referring to a 3rd person object; the suffix had its roots in either a possessive suffix (Mahieu 2009: 122-124) or a pronoun (Honti 1995: 57–58). This suffix was the origin of the development of the object conjugation in Ugric, Samoyed and Mordvin, but conceivably also of the medial in Finnic. A suffix *-ksen (sg.), *-kset (pl.) can be traced in the South Estonian opposition between transitive and medial verbs: transitive 3rd pers. sing. jaga, pl. jagavag 'divide' vs. intransitive/medial palas, palazõq 'burn' (intransitive) (Posti 1980: 112-113). The same suffix underlies the reflexive conjugation in languages such as Veps and Old Finnish, e.g. forms such as kiennexen, keännexet in Agricola's writings (Forsman-Svensson 2011: 18.1.1). A connection with the PU object reference subject has to my knowledge not been proposed, but, with the *-k- element in the Finnic suffix as a likely present-tense marker (Posti 1980: 114), it would seem obvious. The same suffix is present in the Proto-Finnic passive suffix *-*ttA-ksen*, the first part of which is based on a reflexive or causative derivational item (Posti 1961: 364–365, Hakulinen 1979: 243).

Second, the tense system expanded with a grammaticized periphrastic perfect tense. An opposition between a present and a past tense (*- \pm /s/A-) can be safely reconstructed to Proto-Uralic (Lehtinen 2007: 70), but the perfect tense formed with *olla* 'be' and a participle is a Finnic innovation. Saami has a similar periphrastic perfect tense, but it is formed with an auxiliary verb and participial suffixes which are both etymologically distinct (Sammallahti 1998: 80).

Third, and related to the above, the participial system was restructured with voice and tense categories, involving new suffixes. A number of participial or action noun suffixes can be reconstructed to Proto-Uralic, namely *-pA, *-jA (nomen agentis, present tense) and *-mA (resultative), but to what extent these formed a participial paradigm is unknown. These suffixes did not enter into a voice opposition - the suffix *-mA is still neutral as to voice in Mari (see below) and the Permic languages (Leinonen 2000: 421–422). The *-mA suffix, which is of central interest here, is connected to a wide array of derivational suffixes, with *-mA indicating resultativeness when used deverbally (*purema* 'bite' from *pure*- 'to bite') and locality when used denominally (*rintama* '(military) front' from *rinta* 'breast') (Koivisto 2005: 154).

The system emerging in Proto-Finnic consists of a present active *-pA (and in some Finnic languages *-jA), a present passive *-ttApA, a past active *-nUt, $-nU\delta e$ - and a past passive *-ttU (in some Finnic languages secondarily *-tUt). The origin of some of these suffixes is obscure. While the dental element in the passive participles seems obviously related to that of the passive suffix (Hakulinen 1979: 221), the past active participle *-nUt is unexplained except to the extent that it seems a composite suffix of some kind, with the second part similar to the derivational element in such nouns as Finnish *ohut* 'thin' (Hakulinen 1979: 215). This derivational element is, however, quite rare, and it seems impossible to semantically account for its presence in a participial suffix. The two suffixes bear some phonological similarity to the Indo-European action noun suffixes *-to- and *-no- (see Drinka

2009), but none of the Indo-European languages known to have been in contact with Proto-Finnic or its ancestors shows these suffixes divided according to a voice opposition.

The three developments described above are partially shared with the closest relatives of Finnic, namely Saami and Mordvin. Saami has a passive based on the suffix *-ov(i)-, related to a Finnic reflexive derivational suffix -u- (Sammallahti 1998: 84), but Mordvin exhibits no passive. Saami likewise has a periphrastic perfect tense with *lea*- 'be' and a perfect participle with -n, --me--, related to Finnic *-*mA* (Sammallahti 1998: 80), and this is likewise absent from Mordvin. The participial system in Saami seems to more closely mirror Proto-Uralic, with a present participle *-*jA* and the perfect participle mentioned above (Korhonen 1989: 52), in Mordvin, we find reflexes of both *-*pA* and *-*jA* as well as a perfect tense *-*mA*.

What do we find in those language groups with which we know Finnic to have been in close contact? In Germanic, Gothic shows a morphological passive based on the Indo-European medial, whereas elsewhere a periphrastic passive occurs formed with an auxiliary and the *-*to*/*-*no* participle; Germanic exhibits a grammaticalized periphrastic perfect tense with a *have* or *be*-auxiliary and the same *-*to*/*-*no* participle divided according to weak and strong verbs, and a non-diathetic system of participial suffixes (present tense *-*nt*-, past *-*to*/*-*no*) (Prokosch 1939: 205, 206, 209, 219; Boer 1924: 275).

In the Baltic languages, we find periphrastic passives only (formed with an auxiliary and a participle with *-*to* and *-*mo*), a periphrastic perfect tense with an auxiliary (*be*) and a participle, and a fully diathetic system of participles: present active *-*nt*-, past active *-*wos*-, present passive *-*mo*-, past passive *-*to* (Endzelins 1971: 246–250, Schmalstieg 1988: 3–4, 13, 21–22, 30–31).

In the Slavic languages (with Old Church Slavonic standing here for Slavic as a whole), we find both morphological passives (formed through the agglutination of a reflexive pronoun) and periphrastic passives (formed through an auxiliary and a participle). Slavic also exhibits a periphrastic perfect tense with an auxiliary (*be*) and a participle, and, similarly to Baltic, a fully diathetic system of participles: present active *-qt*, *-et*, past active *-ъs*, *-lo*, present passive *-mъ*, past passive *-to*, *-no* depending on the verb stem (Leskien 1969: 130, 135–136, 169–170).

3. What do we need to account for?

Based on the above, what is it we need to account for in the transition from Pre-Finnic to Proto-Finnic? First, the replacement of the nondiathetic participle (neutral with regard to voice opposition) or resultative verbal adjective suffix *-mA (which grammaticized in Saami as a perfect participle suffix) by the diathetic pair of active *-nUt, *- $nU\delta e$ - and passive *-ttU. These participles were then involved in the grammaticization of a periphrastic perfect tense; despite the structural similarities, this tense must be independent from that in Saami, as different auxiliaries and different participial suffixes are involved. The origin of the participial suffixes themselves furthermore involves unknowns, particularly that of *-nUt.

Second, the emergence of a medial conjugation (retained in a lexicalized fashion in South Estonian, developed as a reflexive elsewhere), and – perhaps on the basis of the medial – of a passive conjugation with the reflexive or causative suffix *-ttA and the medial *-ksen. This passive must originally have been promotional (Ikola 1959: 41-43, Posti 1961: 365); in other words, what is currently an object argument must originally have been a subject argument. It is then likely that it was originally polypersonal as well. Traces of polypersonal passives are found in South Estonian, Old South Estonian and Old Finnish, and the polypersonal passive in Old Finnish at least may well be archaic (De Smit 2011). The emergence of periphrastic (perfect tense) passives may well have been an independent development. In Old Finnish (De Smit 2006: 107-108) as well as in Finnish dialects (Ikola 1959: 44), periphrastic passives often agree with their subjects, suggesting that they may have arisen as copular constructions and been pressed into service in the passive paradigm relatively recently.

Some possible foreign models can be dismissed as playing a role in these developments. Influence from the Germanic languages seems unlikely: the Germanic mediopassive (retained in Gothic) is very different from the Finnic passive in terms of the origin of suffixes, and Germanic exhibits no diathesis in participial suffixes. The morphological passive in Slavic is very similar to that of Finnic in terms of the origin of suffixes. Both are characterized by the suffixation of a reflexive pronominal element. A Slavic model pattern, however, would be chronologically problematic. Diathesis in participial suffixes is exhibited by both Baltic and Slavic – the question is, how old this diathesis is. And finally, the phonological similarity between the suffixes *-*no* and *-*to* on the Indo-European side and the Finnic *-*nUt* and *-*ttU* must be taken as accidental, as no language on the Indo-European side divides the suffixes according to active-passive diathesis.

4. The passive in Baltic and Finnic

Let us take a closer look at the passives of the Finnic and Baltic languages. Though the passive of Standard Finnish is non-promotional, with the argument marked as an object, both the morphological (nonperiphrastic) and periphrastic passives may show promotional features, with the argument behaving in accordance with subject-marking, in a variety of Finnic languages. Non-promotional passives such as that in (4), where the argument shows overt object case-marking, or (5), where the argument is unmarked in a way that still allows for its analysis as an object, in contrast with the occurrence of agreement markers in Old Finnish (6) and South Estonian (7):

Finnish

(4) *hänet* tapetaan he-ACC kill-PASS "He will be killed"

Veps (Kettunen 1943: 426)

(5) *końd'i amptaze, ampt'ih'e* bear.NOM shoot-PASS shoot-PASS.PST "The bear is being shot, was shot" Old Finnish (Agricola NT 1548, Acts 26:10)

(6)	Ja	coska	he	tapettijt /
	and	when	they.NOM	kill-pass.pst-3pl
	autin	mineki	sijhen	Domion.
	helped	I-too	that-to	sentence-to
	"and when	they were p	out to death, I	cast my vote against them."

South Estonian (Sangaste, Lehtinen 1985: 279)

(7)	sa	tapettat	maha ^ç
	you.NOM	kill-PASS-2SG	ground-to
	"You will be		

Tapani Lehtinen (1985: 282) provides arguments to regard the South Estonian forms above as innovative. The Old Finnish forms, in contrast, were argued to be archaic by Ikola (1959) and I concur (De Smit 2011). Be that as it may, the consensus view of the origin of the passive suffix as a combination of a causative/reflexive and a medial element necessitates that it must originally have been promotional, and personal suffixes such as the ones that occur in Old Finnish and South Estonian may then well have occurred in Proto-Finnic as well.

The periphrastic, perfect-tense passive is likewise non-promotional in Standard Finnish (8), but may be promotional in Finnish dialects (Ikola 1959: 44) and a number of Finnic varieties such as Old Finnish (9) and Veps (10):

Finnish (ISK §1319)

(8) *Uhrit* on viety sairaalaan victim.NOM-PL be.3SG take-PTCP.PASS.PST hospital-to "The victims have been taken to the hospital"

Old Finnish (Agricola, NT 1548, John 3:28)

(9) Em mine ole Christus / wan mine NEG-1SG I.NOM be Christ.NOM but I.NOM olen henen edhellens lehetettu. before be-1sG him-GEN sent-PTCP.PASS.PST "I am not the Messiah but am sent ahead of him."

Veps (Kettunen 1943: 510)

(10)	лаһп	от	somustet
	bream.NOM	be.3SG	scale-PTCP.PASS.PST
	лаһпад	omat	somustetud
	bream.NOM-PL	be-3PL	scale-PTCP.PASS.PST
	"The bream has be	een scaled / the br	eams have been scaled"

Thus, whereas the Finnic non-promotional passive is reconstructed as originally promotional on the basis of the origin of the suffix, the periphrastic passive may still be promotional in varieties of Finnic. As it likely originated from a copular, predicative construction involving a subject and a passive participle, it was doubtlessly promotional in Proto-Finnic as well. This means that the passive constructions in Proto-Finnic were structurally more similar to the periphrastic passives of the Baltic languages than they are in modern languages such as Standard Finnish.

The Baltic languages have periphrastic passives only, formed by the auxiliary *tikt* (Latvian) or $b\bar{u}ti$ (Lith.), $b\bar{u}t$ (Latvian). The participial suffix is *-ta-* in Latvian, *-ta-*(past)/*-ma-*(present) in Lithuanian. In Lithuanian, a genitive agent may occur with the passive. In Latvian, this is possible only with adnominal participial constructions.

Latvian (Holvoet 2001: 368)

(11)	majā	tiek	celta
	house.NOM.SG	AUX	built-ptcp.pass.pf.nom.fem.sg
"The house is being built"		eing built"	

Lithuanian (Genušiene 2006: 30)

- (12) *langa-s* (*yra*) *atveria-m-as* (*Petr-o*) window-NOM (is) open-PTCP.PASS.PRS-NOM Peter-GEN "The window is being opened by (Peter)."
- (13) *langa-s buvo atver-t-as Petr-o* window-NOM be open-PTCP.PASS.PST-NOM Peter-GEN "The window was opened by Peter"

As mentioned, constructions involving the Finnic participial suffixes -mA and -ttU may be combined with genitive agents to form promotional passive constructions. The similarity between the Finnish constructions (2) and (3) above and the Lithuanian constructions (12) and (13) is striking. This is even more the case with the following Lithuanian evidential constructions, at least structurally (though not semantically):

Lithuanian evidential (Lavine 1999)

- (14) *Darbininkų vežama plytos* workers-GEN being-carted-*ma* bricks-NOM.PL "Workers are evidently carting bricks"
- (15) Jonuko tie grybai atnešta Jonukas-GEN these mushrooms-NOM.PL brought-ta "Apparently Jonukas brought these mushrooms."

Interestingly, the use of participial suffixes in an evidential construction in Lithuanian has a parallel in the Permic languages, where the past participle $-\ddot{o}m$ (<*-mA) is used to express evidentiality (Leinonen 2000). In determining the possible role of Baltic models in the development of active-passive diathesis in Proto-Finnic, we first have to deal with a more recent development connecting parts of the Finnic language area, Baltic and North Russian. This is the so-called possessive perfect construction, in which a locative possessor (which may be the agent) is connected with a possessed patient and a morphologically passive participle, which may be transitive or intransitive (Lindström and Tragel 2010, Seržant 2012):

Finnic: Estonian (Lindström and Tragel 2010: 379, 381)

(16)	ta-l	ikka	vanema-d
	he-at	Part	parents-NOM.PL
	ol-i-d	vist	tape-tud
	were-PST-3PL	probably	kill-PTCP.PST
	"His parents w	ere killed I think"	

(17) *mu-l* on *juba* maga-tud I-at is.3SG already sleep-PTCP.PST "I have already slept"

Latvian (Seržant 2012: 159)

(18) *vinam viss jau* him-DAT.SG all-NOM.SG already *bija izteik-t-s* be-PST.3SG say-PTCP.PASS.PST-NOM "He has already said everything (he had to say)"

North Russian (Jung 2009: 208–209)

(19)	и	nas	takoj	by-l
	by	we.GEN	such.NOM	be-PST
	bol'šoj	tramplin		sdela-n-o
	big.NOM	springboa	rd.NOM	made-no
	"We had a	made such a bi	ig springbo	ard (trampoline)"

(20)	и	menja	by-l-o	plaka-n-o
	at	me.GEN	be-PST	cried-no
"I had cried"		ed"		

This isogloss connecting Finnic, Baltic and North Russian is most likely relatively recent: in North Russian the construction is encountered from the 16th century onwards (Jung 2007: 140–143), and in Old Estonian it is not found (Lindström and Tragel 2010: 374).

In contrast, the construction where a genitive agent is combined with a passive participle is of ancient lineage in both Finnic and Baltic. In Finnic, we have first of all the construction with the -mA participle in Finnish and North Karelian (where it is rare):

North Karelian (Ojajärvi 1950: 81)

(21) *süöjätär akam vaihtamat pojat* syöjätär hag-GEN exchange-*mA*.NOM-PL boy.NOM-PL "The boys exchanged by the old *syöjätär* (harpy, evil witch)"

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It competes with a semantically identical construction which employs the -ttU participle, and which occurs throughout the Finnic language area:

Karelian (Ojajärvi 1950: 81)

(22) *tämä stūla ol lapsien murennettu* this.NOM chair.NOM be-PST.3SG child-PL-GEN break-*ttU*.NOM "This chair was broken by the children"

In all Finnic languages the agent is marked with the genitive, except for Veps, where it is marked with a locative:

Veps (Kettunen 1943: 511)

(23) ol'nel' löudet vöü końd' iad be-PST.3SG still four bear-PART find-*ttU*.NOM vaugdjarviššīl sügüzū Valkeajärvi-PL-at autumn-in man of "Four bears were still found by the men of Valkeajärvi in the autumn"

Ojajärvi (1950) lists examples of the same construction with a morphologically active participial suffix *-nUt from Finnic dialects. I have been unable to find similar examples in other Finnic languages:

Finnish, Hirvensalmi (Savo) (Ojajärvi 1950: 82)

(24) <i>Joka</i>	hiire(n)	syönyttä	syöp
who.NOM	mouse-GEN	eat-nUt-PART	eat-3sG
"Who eats	what has been	gnawed on by a l	mouse"

What is widespread, however, is the type of construction that employs a present-tense passive participle *-*ttAvA*. These occur in Standard Finnish as well (Kangasmaa-Minn 1969: 54) Note the usage with intransitive verbs in the example from folk poetry (26) below:

MERLIJN DE SMIT

Karelian (Ojajärvi 1950: 84)

(25) meien $h\bar{t}$ tettävä se on nurmi we-GEN mow-ttAvA it.NOM be.3SG field.NOM "The field is for us to be mown" \rightarrow "We should mow the field."

Folk poetry, Latvajärvi (SKVR I:1 473a)

(26) Kantop(a) läikvtteli vettä carry-3SG splash-PST.3SG water-PART Kat't'ilalla pienośella, small-with kettle-with Yhen mäntävällä, šormen go-*ttAvA*-with one-GEN finger-GEN mahuttavalla Peikalon thumb-GEN fit-*ttAvA*-with "Carried the water, splashing In a tiny kettle One finger could be put in, One thumb only fit"

In Latvian, constructions that similarly employ a genitive agent are restricted to adnominal participles (27) or copular constructions (28), but do not occur with the passive proper:

Latvian (Holvoet 2000: 46)

(27)	tēva	celtā	māja	
	father-GEN	build-TA	house.NOM	
	"House built by	/ father"		
(28)	māja	ir	tēva	celtā
	house.NOM	was	father-GEN	built-TA
	"The house wa	s built by (the) fa	ther"	

In Lithuanian, in contrast, genitive agents may indeed occur with the passive proper, and with both past-tense (*-*ta*) passives and present-tense (*-*ma*) ones (31). As we see from the following examples, the construction may be formed with both transitive and intransitive verbs:

Lithuanian (Ambrazas 2004: 1–2)

(29)	senų,	miškaĩ	mylėta
	old-GEN.PL	forests-NOM.PL	love-TA
	"The forests were lo	he forests were loved by the old (people)"	

(30) *čia tėvų*, *miegota* here parents-GEN.PL sleep-*TA* "The parents slept here"

(31)	vėjo	girgždinamos	
	wind-GEN	cause to squeak	-MA
	durys	neleido	miegoti (Schmalstieg 1988: 23)
	doors	didn't allow	to sleep
"The doors squeaking		squeaking in the	wind didn't allow one to sleep"

Genitive agents occur likewise with the evidential constructions mentioned above (13 and 14). The possibility of forming these constructions with intransitive verbs exists in both Baltic and Finnic, though not in Standard Finnish. Compare Lithuanian (Schmalstieg 1999: 31), which shows a genitive agent with an intransitive verb in an attributive construction:

(32)	tautas	ejamā	diena
	people-GEN.SG	leaving-MA	day-NOM.SG
	"Day when the bride	leaves the parents	' household."

With Veps (Kettunen 1943: 511):

(33)	pormāžō	jokset
	fly-at	run- <i>ttU</i>
	"The trace of a	fly"

What is much less clear is whether the Finnic and Baltic constructions are similar with respect to neutrality of active-passive contrast. Schmalstieg (1988: 29) argues that Baltic forms such as gýdomas (gýdantis) vanduõ 'curative water', pjáunamas (pjáunantis) peĩlis 'cutting knife' reflect such an original neutrality. The same cannot be said of Finnic, where the extent and origin of the usage of active *-nUt participles in passive constructions, mentioned by Ojajärvi (1950: 82, example (23) above) is, to me, entirely unclear.

Briefly, then, Baltic and Finnic are characterized by passive constructions with genitive agents, and (strikingly) both language groups show the use of two different suffixes - *-ttU and *-mA in Finnic, *-tA and *-mA in Baltic - which are phonologically very similar; they differ of course in that in Baltic the suffixes are used to express a tense opposition, while in Finnic they seem to be synonymous. In both Baltic and Finnic, the construction appears with both transitives and intransitives.

5. The origin of the agented passive in Finnic

Lars-Gunnar Larsson (1996, 2001) has drawn particular attention to the similarity between agented passive constructions in Baltic and Finnic, and postulates that the direction of influence has been from the Baltic languages to Finnic (Larsson 2001: 247–249). As noted by Larsson (1996: 150), however, the uncertain age of the Finnic construction complicates any such hypothesis.

While the -ttU participle has no cognates in other Uralic languages, the -mA participle very definitely does. Thus Saami (Ylikoski 2009: 130), with its participial -n, -me based on *-mA:

(34)	áhči	čálli-n	girji
	father-GEN	write-PTCP.PASS	book
	"The book written by (the) father"		

Mordvin (Bartens 1979: 58):

(35) *večkima jalgam* love-PTCP.PASS friend-1SG "My beloved friend" In Mordvin, agented constructions may occur with other participles as well (Larsson 1996: 147):

(36) *t'et'an* sakavt moda father-GEN plough-PTCP field.NOM "The field ploughed by (the) father."

Mari (Bartens 1979: 117-119):

(37) *ludmo kńiga* read-PTCP book "The book that was read", "The book to be read" (imperfect and perfect)

(38) *memnan* kalasəme tuštəštəna we-GEN mention-PTCP review-in "In the review mentioned by us"

In Mari, these constructions may occur with intransitives as well (Bartens 1979: 117–119):

(39) memnan	tolmo	korno	
we-GEN	come-PTCP	road	
"The road we ca	"The road we came by"		

In other Uralic languages the genitive *-*n* may not be represented, but similar constructions, with another agent case, do occur: thus in Komi (Leinonen 2002: 244–245) with an instrumental or with the (historically distinct) Komi genitive, in Ob-Ugric (Kangasmaa-Minn 1969: 58) with a nominative. Further examples are adduced by Katz (1980: 396), who regards the construction as part of a Proto-Uralic ergative. The usage of the genitive agent may thus be reconstructed to the same Uralic stage as the verbal suffix -*mA* itself. Notably, Koivisto (2005: 168–170) argues that the rather thin spread of the construction in Finnic indicates that it grammaticized much more recently from deverbal nouns such as *purema* 'bite'; but the great similarity between the Finnish construction in (1) and similar ones such as those in Saami (34), together with the odd, structurally marginal status of the Finnish construction (it occurs obligatorily with a genitive agent) would, in my opinion, indicate an archaism, perhaps conserved partly through contacts between early North Finnic dialects and the emerging Saami languages, rather than a recent innovation. The genitive agent could naturally have grammaticized from a possessive construction: originally, the agented participial construction in constructions such as (1) would mean something like "father's (given) gift" with "father" being the (initial) possessor or controller of the gift. A shift from this meaning to that of the agent of the giving would then follow naturally. Similarly, in a predicative construction like "That bear is my kill" or "That tool is (of) my making", the agent of the action could equally easily originate from the possessor or controller of the result of the action.

That said, it is uncertain to what extent the construction originally involved predicative constructions as in (2) above, aside from the adnominal attributive constructions that occur widely in the sister languages of Finnic (34–39). Koivisto (2005: 168) considers it possible that the Finnish construction developed specifically out of the use of verbal nouns in predicative position; this, however, is connected to his hypothesis of a recent origin for the construction. If, on the contrary, attributive constructions such as those in Saami and Mari are held to be historically cognate with the Finnish construction, predicative use may rather have developed relatively recently out of attributive use. It is also uncertain to what extent constructions involving -mA were integrated into the tense/aspect system of Proto-Uralic. The suffix -mA is part of a periphrastic perfect tense in Saami only, and the Uralic tense/ aspect system is generally taken to have consisted only of a binary opposition between present and past tense (Lehtinen 2007: 70).

On the Baltic side, there are various views as to the age of the agented participial construction. Schmalstieg (1978: 15–16, 1988, 1999) regards the construction with *-*to* and a genitive agent as a remnant of a PIE ergative; Holvoet (2000), on the other hand, regards the genitive agent as originally purely adnominal, then appearing in copular constructions (as in both Latvian and Lithuanian), and only then being integrated as part of a passive construction – a development restricted to Lithuanian only. The absence of the latter development of Latvian, according to Holvoet (2000: 56), is based on Finnic influence.

As for the origin of suffixes, participial *-mo- is attested in Baltic and Slavic, but is spread thinly elsewhere in the Indo-European languages (involving such languages as Luwian and Tocharian). The suffix *-to-, on the other hand, is very well represented in the Indo-European languages, and co-occurs with genitive agents in other subgroups, such as Indo-Iranian. In general, the past participial suffixes in Baltic have clear Indo-European roots – with active Lith. -*ęs*-, Lat. -*is*- from IE perfect participle *-wos- and passive -ta- from the IE verbal adjective *-to- (Drinka 2009: 141–142); active-passive diathesis can definitely be reconstructed to Proto-Baltic at least. The role of the suffix *-mo- in active-passive diathesis and the etymological roots of that suffix are much less clear.

In other words: participial constructions with genitive agents are of ancient lineage in both language families. The specific construction involving PU *-mA-, IE *-mo-, however, has a problematic spread on both sides. In the Indo-European languages it is thinly spread outside of Baltic and Slavic; in the Uralic languages it occurs widely outside of Finnic, where it is quite marginal.

If the agented participial construction is a Western Uralic innovation (which I believe is doubtful, as somewhat similar constructions occur in Ob-Ugric and Samoyed as well (Kangasmaa-Minn 1969: 58)), Indo-European or Baltic model patterns could have played a role only if we assume Baltic syntactic influence to have occurred earlier than the preponderant share of borrowing; most lexical borrowings appear restricted to Finnic, with a significant number occurring in Saami but far fewer in Mordvin. As it is, this possibility should not be dismissed out of hand. There is a parallel in the grammaticization of the Uralic ablative case into an object case, which has been convincingly argued to rest on Baltic model patterns by Larsson (1983). As the Uralic ablative underlies the plural object case in Saami, and an incipient tendency towards its use as an object case is found in Mordvin as well, this grammaticization must have preceded the bulk of lexical borrowing from Baltic. The more recent dating of Proto-Uralic by such authors as Kallio (2006) and Häkkinen (2009) may bolster this possibility.

A more modest hypothesis would be that Baltic model patterns played a role in the restricted survival of agented *-mA participials

in Finnic (Larsson 2001: 247–248). It would nonetheless require explaining why the *-mA participial is the most marginal in precisely that Uralic subgroup where Baltic lexical borrowings are the most numerous. The persistence of the agented *-mA participial construction in the northernmost Finnic languages – Finnish and Karelian – suggests the possibility of model patterns from Saami as well.

What if the direction of influence is the reverse? Could the agented participial constructions of Baltic, specifically those with *-mo-, rest on Uralic model patterns instead? After all, on the Indo-European side the suffix *-mo- seems to be represented best in precisely Baltic and Slavic, which are the Indo-European languages which have historically come into the closest proximity with Uralic. One problem nonetheless is that, as noted by Holvoet (2000), agented participial constructions appear to occur in a more restricted fashion in Latvian than in Lithuanian. A specifically Finnic influence would then play a role in the restriction of the construction, rather than in its development. In any event, any such hypothesis would require more, and more convincing, instances of syntactic Uralisms in Baltic and Slavic than have hitherto been adduced. In contrast, the case for syntactic Balticisms in Finnic (and Saami) is very strong.

6. Conclusions

The major change that occurred during the emergence of Finnic was the shift from agented participial constructions to agented *passive* participial constructions, even if Finnic may nonetheless show traces of an earlier absence of diathesis in the usage of agented participial constructions with intransitives in Veps ((33) above), or the use of morphologically active participles in Finnish dialects ((23) above). Obviously, this change is based on the emergence of active-passive diathesis in Proto-Finnic times.

The emergence of this diathesis may be based, in part but not in whole, on Baltic models. The morphological passive of Finnic lacks clear models on the Indo-European side: Baltic passives are periphrastic, and the Germanic mediopassive is a very different beast. The Finnic morphological passive may best be explained as an autochthonous development of the Finnic medial, which in turn may have its roots in a Pre-Finnic objective conjugation. The emergence of diathetic passive participial suffixes, however, may in contrast have been stimulated by the presence of Baltic model patterns. It should be noted that Baltic (and Slavic) participial suffixes show active-passive diathesis in a way that the Germanic suffixes do not.

While the development of diathetic participles and that of a morphological passive are both obviously related to the development of active-passive diathesis in Finnic as such, the two developments need not have taken place at the same time, or have the same causes. The incorporation of the morphological passive with the participial constructions into a passive paradigm may even be largely the work of prescriptive grammar: in Old Finnish and Finnish dialects the participial constructions often appear to be copular, while the morphological passive (in dialectal Finnish at least) is clearly non-promotional. In other words, they are different constructions, which may have very different origins.

The hypothesis of Baltic influence on the emergence of the Finnic participial system is strengthened, first of all, by the presence of a Baltic influence on other areas of Finnic grammar, such as object marking (Larsson 1983), secondly, by the occurrence of strikingly similar agented participial constructions in both language groups – even if the relationships between these specific agented participial constructions are lacking in clarity.

I suggest that the similarity between the Finnic *-mA construction and the Baltic constructions with *-mo is entirely accidental. The Finnic construction has deep roots on the Uralic side, the Baltic construction somewhat less clear ones on the Indo-European side. A Finnic influence on Baltic nonetheless seems unlikely without the presence of clear grammatical borrowings elsewhere. On the other hand, it seems likely that Baltic model patterns guided the replacement in most Finnic languages of agented *-mA participles with agented *-ttUones. This development could have been stimulated by the accidental phonological similarity between IE *-to and PF *-ttU.

In short, I suggest that Baltic model patterns influenced Finnic primarily in the emergence of active and passive participles as such, and that this influence was stimulated by the presence of agented participial constructions in both language groups. The shift from an originally non-diathetic agented participial construction with *-*mA* to a clearly passive construction with *-*ttU* need not itself rest on Baltic model patterns. It should be noted that Baltic, according to Schmalstieg (1999: 31), shows traces of an earlier neutrality in terms of active-passive diathesis in these constructions. The shift in question was instead simply due to *-*ttU* being (unlike *-*mA*) a passive participial suffix from the beginning. The restriction of the Finnish and Karelian *-*mA* constructions to transitives may be, as Larsson (2001: 247–248) suggests, based on Baltic model patterns, but it may also be simply the result of the *-*mA* participle behaving after the model of passive *-*ttU*.

It seems unlikely that a Baltic influence underlies the usage of the agented *-mA participle in the Western Uralic languages as such. First, the construction seems to be restricted to Western Uralic to the same extent as the *-*n* genitive as an agent case, but constructions with differentially marked agents and *-mA participles occur in Permic and Ob-Ugric as well. Second, even the construction as it occurs in the Western Uralic languages seems to be too old for Baltic model patterns to have played a credible role. A caveat is nonetheless that "Western Uralic" may have been a significantly more recent linguistic stage than previously thought, and that the very credible role of Baltic model patterns in the grammaticization of the Uralic ablative into an object marker runs into a similar chronological problem, though less severe: here, syntactic influence seems to precede the bulk of lexical influence. This is not impossible, although it necessitates assuming a period of intense bilingual contact without lexical borrowing, or perhaps a language shift among a group of speakers of Baltic to an Uralic language, during a very early period of Baltic-Uralic contacts. For this reason, the possibility needs to be taken into account. If one contact-induced syntactic change runs into chronological problems, chronology wins; but many such anachronistic syntactic changes may eventually lead to chronology being modified instead.

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Tiivistelmä

Merlijn De Smit

Tässä artikkelissa käsittelen kahta genetiiviagentilla varustettua partisiippirakennetta itämerensuomalaisissa kielissä ja niiden mahdollisia balttilaisia vastineita. Kyseessä olevat rakenteet ovat agenttipartisiippi 'hiiren syömä leipä', joka esiintyy suomessa ja marginaalisesti karjalassa, ja samankaltainen 'hiiren syöty leipä' -rakenne, joka esiintyy hyvin laajasti itämerensuomalaisella kielialueella. Molemmilla rakenteilla on hyvin samankaltaiset vastineet balttilaisissa kielissä: liettuassa sekä -ta-partisiippi että -ma-partisiippi voi saada genetiiviagentin, jälkimmäisessä tapauksessa kyseessä on evidentiaalirakenne. Mahdollisten kontaktiselitysten arvioimiseksi on kuitenkin ensin tarkastettava, miten diateesi on kehittynyt itämerensuomessa, balttilaiskielissä ja muissa indoeurooppalaiskielissä. Esitän, että itämerensuomalaisen diateesin kehitykseen on voinut vaikuttaa balttilaiset (tai baltoslaavilaiset), mutta ei germaaniset mallirakenteet, vaikka itse passiivisuffiksi juontaa juurensa aiemmasta mediaalista ja lopuksi kai uralilaisesta objektikonjugaatiosta. Itämerensuomalainen -mA-partisiippi ja sen agenttirakenne vaikuttavat olevan hyvin vanhaa perua - vastineita löytyy saamesta ja marista – ja -ttU-partisiippi on itämerensuomalainen uudennos. Sen balttilaiset vastineet ovat molemmat indoeurooppalaista perua, ja -ta-partisiipin genetiiviagenttia vastaavat rakenteet esiintyvät mm. indoiranilaisissa kielissä. Itse -mA-partisiipin agenttirakenne on sen verran vanhaa perua, että sen kehitykseen eivät balttilaiset mallirakenteet ole voineet vaikuttaa. Balttilaiset kielet ovat sen sijaan hyvinkin voineet vaikuttaa siihen, että genetiiviagentti on kantasuomessa siirtynyt myös -ttU-partisiippiin.

Santrauka

Merlijn De Smit

Šiame straipsnyje nagrinėsiu dvi dalyvines konstrukcijas su kilmininkiniu veikėju finų kalbose ir galimus jų atitikmenis baltų kalbose. Aptariamos konstrukcijos yra konstrukcija su kilmininkiniu veikėju hiiren svömä leipä, kuri yra sutinkama suomiu kalboj ir marginaliai karelų kalboj ir panaši konstrukcija hiiren syöty leipä, kuri yra plačiai paplitusi finų kalbų areale. Abi konstrukcijos turi labai panašius atitikmenis baltu kalbose: lietuviu kalboje tiek ma-, tiek ta-dalvvis gali turėti kilmininkinį veikėją, kitais atvejais kalba eina apie evidencines konstrukcijas. Galimų kontaktų aiškinimų įvertinimui vis dėl to iš pradžių reikia patikrinti, kaip diatezė vystėsi finų, baltų ir kitose indoeuropiečių kalbose. Pateikiu, kad finų diatezės vystymuisi galėjo turėti itakos baltu (arba balto-slavu) kalbos, bet ne germaniškos pavyzdinės konstrukcijos, nors pats neveikiamasis sufiksas kyla iš ankstesnės medialinio arba galiausiai netgi iš urališkojo objektinio asmenavimo. Atrodo, kad finu ma-dalyvis ir jo veikėjo sandara yra labai senos kilmės – atitikmenų randama samių ir marių kalbose – tuo tarpu ttU-dalyvis yra pabaltijo suomių naujovė. Abu jo baltiškieji atitikmenys yra indoeuropiečių kilmės ir ta-dalyvio kimininkinį veikėją atitinkančios konstrukcijos sutinkamos tarp kitko indoiranenų kalbose. Pati mA-dalyvio veikėjo konstrukcija yra tiek senos kilmės, kad jos vystimuisi pavyzdinės baltiškos konstrukcijos negalėjo daryti įtakos. Baltų kalbos tuo tarpu galėjo padaryti tokią įtaką joms, kad kilmininkinis veikėjas finų prokalbėje perėjo taip pat į *ttU*-dalyvį.

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Schematic Form as a theoretical tool for the analysis of prepositions, verbal prefixes and cases in Finnish and in Lithuanian

This paper is a contribution to the discussion about the semantic identity of units functioning as prepositions, verbal prefixes and case suffixes. In an approach inspired by the Theory of Enunciative Operations (Culioli 1990, 1999), the authors consider these kinds of markers as *relators* which establish an abstract relation of location between two terms X and Y: X is located relative to Y. This idea is illustrated by the analysis of two elements, the verbal prefix and preposition is in Lithuanian, and the element -(t)A of the partitive and elative suffixes in Finnish. The precise nature of the relation set up by $i \check{s}$ and -(t)A is defined by means of a Schematic Form which enables to account for the various values expressed by these elements independently of their categorial status or contexts of use. Unlike many other approaches to the description of the semantic value of prepositions, verbal prefixes and case suffixes, this paper refuses to postulate the primacy of a concrete meaning over an abstract one, in particular that of space over other fields, even in a historical perspective. The Schematic Form of is and -(t)A is a theoretical tool which makes it possible to account for the wavs exteriority is expressed in languages. The four markers analyzed in this paper – the Lithuanian prefix and preposition iš, the Finnish partitive suffix -(t)A and elative suffix -stA – implement this

notion in a specific way, which makes them coincide locally but only on a limited overlap: each marker has an identity which is specific and cannot be assimilated to that of the other.

Introduction

The studies on cases, prepositions and verbal prefixes in many languages, even in languages that are typologically quite different, present a striking convergence: most of the debates concerning these three categories consist in determining if such markers are purely grammatical or if it is possible to assign them a semantic content or to distinguish, individually for each marker, which uses should be treated as grammatical and which ones have a semantic value.

The debates on the empty verbal prefixes in Slavic languages (Janda 1985), on the colorless prepositions in French (Spang-Hanssen 1963), on the partition between grammatical (or structural) and semantic cases in Finnish (see e.g. Nikanne 1993; Vainikka 1993; Vilkuna 1996: 75–81; ISK 2004: § 1221–1223; Mahieu 2007: 66–68) are good illustrations of this point. In this respect, we could also quote the partition between lexical and grammatical functions operated by J. Paulauskas (1958) in his analysis of the Lithuanian verbal prefixes, the existence of the "object value" postulated by J. Šukys (1998) for the Lithuanian prepositions, and the status of grammatical case that the contemporary grammars and studies (e.g. Vilkuna 1996: 76–77; Helasvuo 1996; ISK: § 1222) grant to the partitive case in Finnish, which results in concealing its semantism in all its uses other than that of an argument of the verb.

The research dealing with the semantics of these markers – when a semantic value is attributed to them – are also very similar: most of the time, the question is to identify a basic meaning, which corresponds to the main spatial value of the marker, and to derive the other meanings from it, whether as a semantic network or a semantic invariant implemented into the temporal and notional fields by metaphorization or by analogy.

The approach we adopt here differs from these studies in that we don't make a distinction between grammatical and semantic values

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of a linquistic unit. Our theoretical framework is that of the *Theory* of Enunciative and Predicative Operations developed by A. Culioli (1990, 1992, 1999). In this theory, language is not defined as a structure but as an activity, more precisely as a meaningful representational activity. "[T]he goal [of linguistics] is (...) to re-construct, by a theoretical and formal process of a foundational sort, the primitive notions, elementary operations, rules and schemata which generate grammatical categories and patterns specific to each language" (Culioli 1990: 72). The purpose of linguistics thus is to find the invariants which found and regulate language activity, in all its richness and complexity. Culioli therefore insists on the importance of abstraction, for, says he, "without abstraction there can be no generalisation of processes, categories and schemata" (1990: 68).

One of these abstract invariants of human language, one of these primitive elementary operations at stake in any particular language, is the *operation of location* ("opération de repérage"; Culioli 1990: 74–75; see also Paillard 1992: 75–82): the concept of location is not to be confused with a spatial location, it is linked to the idea of locating one term in relation to another and to that of determination. "When, within a referential system, a term X (locatum) is located relative to a term Y (locator), the operation attributes a referential value to X (i.e. determines a property of X) which it did not have before" (Culioli *idem*). The essential point is that an object only acquires a determined value by means of a system of location:

(1) *This book* (locatum) *is* (operator of location) *a dictionary* (locator) *The city* (locatum) *of* (operator of location) *London* (locator)

The specificity of this theory is that meaning is not considered as a primitive, which each language would encode in its own way: meaning is the result of the various interactions of the different components of the utterance. All the units of the utterance are then meaningful, and it is necessary to take them into account and to consider the tangled relationships in which they are involved to get the value of the utterance.

The present study will focus on four units of two different languages, the Lithuanian preposition and verbal prefix is, and the Finnish partitive (-(t)A) and elative (-stA) case markers. Taking into account the analyses of numerous linguists (e.g. Brøndal 1950; Hagège 1997; Franckel & Paillard 2007; de Penanros 2013a), we will consider that all theses units, whatever their category (preposition, verbal prefixe or case), are *relators*. We thus propose to describe them as establishing a relation of location between two terms X and Y. Furthermore, we provide this commonly admitted general definition with a crucial precision: the relation established by the case, the preposition or the verbal prefix is non symmetrical, in so far as Y is the source of the determinations of X.

The choice of these two languages, which are typologically unrelated, but *are geographically* close to each other, is an outcome of circumstances (the first version of this paper was presented at the conference *Baltic Languages and White Nights: Contacts between Baltic and Uralic languages* in 2012). Nevertheless, we consider that the four markers we are interested in are examples of the same kind of operation of location. Indeed, the common framework of description for these four markers has the advantage to enable us to take into account the kinships between units which are most of the time the object of separate analyses: we base our analysis on the identity of form between *iš* as verbal prefix or preposition, and the identity of the element -(t)A in the suffixes of the partitive case (-(t)A) and the elative case (-stA) of Finnish.

The aim of this paper is to show that the relation of location established by these markers does not imply notions like movement or trajectory, which are most commonly used in the description of their semantic contents (see e.g. Šukys 1998 ; Alhoniemi 1983: 215; Leino 1989: 189–190; Huumo & Ojutkangas 2006: 12–14; for an alternative analysis see Rahkonen 1977). A quick survey of the different values of these markers shows the limits of positing that their spatial value is at the origin – even in a historical sense – of all the others (for similar remarks see Onikki-Rantajääskö 2001: 219–220, 291). It seems for instance hard to explain that the value of *iš* in example (2) can be derived from its spatial value, which is "the way out":

(2) *Iš-gulė javai. iš-*lie down-PST cereal-NOM.PL 'The cereals have lain down.' In (2), the use of the verbal prefix expresses the fact that the field is completely deteriorated but no notion of going out. We are faced with the same difficulty in example (3) where i functions as a preposition:

(3) Iš veido ji gana graži.
iš face she rather pretty
'Regarding her face, she is rather pretty.'
(or 'She has quite a pretty <u>face</u>.' with the stress on "face")

Here, it is clearly not question of going out of the face; on the contrary, the beauty is located in the face.

The notion of "movement away" is also considered as the basic value of the element *-tA* of the Finnish elative case marker (*-stA*). In addition to this, the suffix *-(t)A*, which the modern grammars call the partitive case, is considered, from a diachronic point of view, as an old local case (Denison 1957: 23, 257; Penttilä 1963: § 262.1; Hakulinen 1979: 101; Helasvuo 1996; Lehtinen 2007: 78–79; ISK 2004: § 1226). However, traces of its supposed original value as a spatial case marker ("movement away from a place") are found only in expressions like *kauka-a* 'from far away', *taka-a* 'from behind', *etelä-mpä-ä* 'from further south'³. The bases of these partitive forms refer to relational notions that have no concrete or stabilized content. It seems difficult to hold them as examples *par excellence* of the primacy of the spatial value in so far as the primacy granted to this value is principally due to the concrete nature we are used to associating to the expression of locations.

As E. Benveniste (1954) has shown through the example of the Indo-European term related to "loyalty" (e.g. *trust* in English), the evolution of the meaning of words does not necessarily go from the concrete meaning to the abstract sense. Research in the field of language acquisition can also be mentioned as a support to this. Studies on the development of the use of prepositions show important disparities among languages. If in English, the local prepositions/particles *down*, *up*, *in*, *on* are acquired first by children, the reverse can be observed in French: children acquire the so-called "abstract" prepositions *pour*;

à, de first, and the "local" preposition *sur* for instance is the last to be acquired (Morgenstern, Parisse, Sekali, 2010).

Given these doubts about the primacy of the concrete meaning over the abstract one, we propose here to define the semantism of the relators $i\check{s}$ and -(t)A, i.e. the precise nature of the relation they set up, by means of an abstract device, called a Schematic Form:

X relator Y, in which:

•

- Y represents a notional domain (Culioli, 1999: 9–10) which can correspond to a notional value (e.g. 'being silver'), a spatial local-isation, a temporal determination, etc.
- this notional domain is structured by the relators *iš* and -(*t*)*A* in two zones: it has an Interior and an Exterior; in the case of a lexical notion, the Interior can be glossed as "truly Y", "truly representative of Y" and the Exterior, which is in a relation of disconnection with the Interior, as "non-Y"
- each relator marks that X originates in Y's Interior, but is located by Y's Exterior.

Y is the term introduced by the preposition or the base of the case suffix. As far as the verbal prefix is concerned, Y is not directly identifiable, it has to be searched in the context. The identification of X depends on the syntactic construction employed, on the order of the constituents, etc.: X can correspond to one term in the context (e.g. subject or object argument of the verb) or to a component of the verb's semantic representation (in this case X does not correspond to any lexical unit).

In the following sections, we will successively examine some of the values of the verbal prefix *iš*-, of the preposition *iš*, and of the partitive and elative cases in order to illustrate the functioning of the schematic form defined above.

^{3.} Note that with the comparative marker, this use is productive.

1. *iš* in Lithuanian

1.1. The verbal prefix *iš*-:

The verbal prefix *iš*- is assigned between 3 and 10 semantic values, depending on the precision of the classification (See Juzėnienė 2006, LKŽ). The problem with these classifications is that they are based on the semantics of the prefixed verbs rather than on the study of the verbal prefix itself: the number of values proposed is then directly related to the number of the prefixed verbs considered, and one could easily multiply this number if one took into account more verbs or the different values of every single prefixed verb considered. Thus considering that it is impossible to determine which classification is the best, we will propose a compromise of 7 values, which seem to appear in most classifications:

- 1. Action directed from the inside to the outside: *išeiti* (*iš*+walk: to walk out), *išmesti* (*iš*+throw: to throw out), *išnešti* (*iš*+carry: to carry out), *išvyti* (*iš*+chase: to chase out)
- 2. Deterioration: *išganyti* (*iš*+pasture: to trample a field pasturing), *išgulti* (*iš*+lie down: to lie down (for wheats))
- 3. Intensive value: *išbučiuoti* (*iš*+kiss: to kiss everybody or to cover with kisses), *išaiškinti* (*iš*+explain: to clarify, to reveal)
- 4. Duration of the action: *išbudėti* (*iš*+watch: watch a long time), *išbūti* (*iš*+be: to stay for a long time), *išdirbti* (*iš*+work: to work a whole time), *išlaukti* (*iš*+wait: to wait a whole time)
- 5. Sufficient action (reflexive verbs): *išsipasakoti* (*iš+si+*tell: tell everything), *išsiverkti* (*iš+si+*cry: to cry one's fill), *išsikalbėti* (*iš+si+*talk: pour out one's feelings)
- 6. End of the action: *ištirpti* (*iš*+thaw: to thaw), *išpurvinti* (*iš*+dirty: to dirty), *išvirti* (*iš*+boil: to boil), *iškepti* (*iš*+bake: to bake)
- 7. Specific values: *išduoti* (*iš*+give: to betray), *išmanyti* (*iš*+think: to understand), *ištikti* (*iš*+suit: to surprise)

We will just take three examples to show how the schematic form of *iš* functions.

1.1.1. The verb *išlaukti* (value of duration):

The verb *išlaukti* is formed on the simple verb *laukti*, which means 'to wait'. The definition of *išlaukti* is "to spend some time waiting, to wait for a whole period of time". *Išlaukti* is employed in contexts where the subject is in a situation negatively evaluated: it is a difficult or unpleasant situation. *Išlaukti* means that the subject longs for the end of this situation.

As far as we know, there is no systematic description of the verb *laukti*; we will therefore propose a minimal hypothesis on its semantics (which we call a "scenario"):

• The scenario of *laukti*: "an element *a* in Sit_i (Situation i) aims at the actualisation of an element *b* in sit_iSit_{i+n} (Situation i+n)"

Išlaukti can be compared to the verb *palaukti*, with the prefix *pa*-which poses the construction of an occurrence of process. *Išlaukti* and *palaukti* are often possible in the same contexts, but have a different meaning.

(4) Didžiulis kuilys vienišius ir žemai nudelbęs galvą sustojo už dešimties žingsnių. Laimė, Ignas buvo patyręs medžiotojas ir šernui kakton nešovė.

Jis išlaukė/palaukė kelias ilgas sekundes,

He iš-waited/pa-waited some long seconds-ACC.PL ir kai šernas pasisuko šonu, paleido taiklų šūvį "po mente". Po šūvio žvėris dar padarė šešis didelius šuolius.

'A huge boar, alone, head down, stopped at a dozen paces. Fortunately, Ignas was an experienced hunter and he did not shoot in the face of the boar. He stood firm for a few long seconds /waited a few long seconds, and when the boar turned aside, he sent a precise shot under the shoulder blade. After the shot, the animal took again 6 big leaps.' In (4) *išlaukti* was employed, because the main thing here is to show that the few seconds, in this dangerous situation, seemed like ages to Ignas: he had to stand firm for long seconds before shooting at the boar. The *pa*-verb (*palaukti*) is possible in this sentence, but it does not express this idea; it simply means that a process of "waiting" took place for a certain period of time.

This value of a "long and difficult waiting" is the specificity of the verb *išlaukti*, it opposes this verb to the simple verb *laukti* or to *palaukti*. The Schematic Form of *iš* permits to account for this value:

- X corresponds to the element *a* of the scenario of the verb *laukti*; this element is syntactically realised as the subject of the verb (Jis).
- Y corresponds to the time interval given by the noun in the accusative case (a few long seconds).
- The notional domain corresponding to this term has 2 zones: the Interior of Y is the time interval defined by "a few long seconds", the Exterior of Y is the period that comes after.
- X is first associated to the Interior of Y: he has to come through these long seconds;
- *iš* says that X is located by the Exterior of Y: in other words, what X aimed at is reached, hence the notion of positive outcome to be found in all the uses of *išlaukti* (see the impossibility of *išlaukti* in example (5b) and compare it to (5a) where *išlaukti* is employed).
- (5a) Sergejus nusprendė vesti Katią iš karto vos grįžęs iš tarnybos armijoje. Dveji išsiskyrimo metai slinko lėtai, bet

Katia	Sergejaus	iš-laukė.
Katia	Sergejus-GEN	iš-wait-PST
Iannana	lžiai angionnana na	a io tàmua

Jaunavedžiai apsigyveno pas jo tėvus.

'Sergejus decided to marry Katia as soon as his military service would end. The two years of separation passed slowly, but Katia waited for the return of Sergejus. The newlyweds settled at Sergejus' parents' place.' (5b) Sergejus nusprendė vesti Katią iš karto vos grįžęs iš tarnybos armijoje.

Katia	<u>truputi</u>	palaukė /*išlaukė
Katia	a little	pa-wait-PST/*iš-wait-PST
bet greita	i nutarė nebel	laukti, mat susirado kitą
'Sergejus	decided to ma	arry Katia as soon as his military service
would en	d. <u>Katia waite</u>	d a little but soon decided not to wait any

The notion of a long and difficult waiting is due to the fact that the Exterior of Y is the goal of the subject: as long as this goal is not achieved, that is, as long as the border between I and E is not crossed, I is the wrong value, hence the interpretation in terms of long and difficult process; see the impossibility of *išlaukti* with adverbs like *šiek tiek, truputi* 'a little', while the prefixed verb *palaukti* is entirely possible:

(6) *šiek tiek, truputį* a little a little 'to wait a little' **išlaukti/laukti/palaukti* *iš-wait-INF/wait-INF/pa-wait-INF

1.1.2. The verb *išaiškinti* (intensive value)

longer as she had found somebody else...'

The verb *aiškinti* is formed on the adjective *aiškus* ('clear') with the factitive suffix -in, it means 'to explain'. We will take as a minimal definition of the simple verb *aiškinti* ('to explain'): 'make an element *a* clear'.

The verb *išaiškinti* is often classified in the intensive value of the verbal prefix: it has two main meanings, 1. to explain completely, until there is nothing left to explain, 2. to reveal. In both cases, the prefix *iš*- has the same functioning:

(7) Prenumeratos kvitų siųsti nereikia.

<u>Speciali kompiuterinė programa iš duomenų bazės</u> special computer program from database <u>išaiškina/*aiškina/*paaiškina laimėtojus</u>, iš-explain/*explain/*pa-explain winner-ACC.PL 'Do not send receipts of subscription. A special computer program reveals the winners from the database.'

(8) Paprastai socialinis darbuotojas dalyvauja ir tuomet, kai medikai pacientui ir jo šeimos nariams <u>pasako ir</u>

išaiškina/paaiškinaligosdiagnozę,iš-explain/pa-explaindiseasediagnosis-ACC.Sgydymo eigą ir padarinius, galimas komplikacijas ir t.t.'Generally a social worker is also there when the doctors tell andclarify/explain the diagnosis of the disease, the treatment protocol and its consequences, the possible complications, etc. to thepatient and the members of his family.'

- X corresponds to the element *a* of the scenario of the verb which is syntactically realised as the object. *a* is an element, which, in a way or another, is unknown: in (7) the names of the winners were unknown, in (8) the diagnosis is not immediately understandable by the family, some parts of it are unknown, hence the explanation.
- Y is the situation in which *a* is: the part of unknown; this situation presents two zones: I the unknown / E no (more) unknown
- *iš* means that X which originates from Y's Interior (it has a part of unknown) is located by Y's Exterior (no more unknown).

Taking into account the Exterior of Y (that is "truly non-Y", i.e. with this verb, truly non-unknown) explains why *išaiškinti* is incompatible with adverbs like *iš dalies* ('partly'), see (9):

(9) *paaiškinti/*išaiškinti iš dalies, kiek, truputį* pa-explain/*iš-explain partly a little a little

1.1.3. The verb *išgulti*

This schematic form of *iš*- enables to account for the most opaque values of the prefix. Let us take as a final example, the value of "deterioration" mentioned in (1), repeated here as (10):

(10) Metai buvo lietingi ir esant neutraliam dirvožemiui

<u>kviečiai</u> **iš-gulė**, ir derlius nedidė jo. wheat-NOM.PL iš-lie down-PST

'The year was rainy and on neutral ground, the wheats have lain down and the harvest has not increased.'

In this case:

- X corresponds to the subject of the verb *gulti* ('wheat')
- Y is the position of the wheat; Y is structured in two zones, where the Interior is the position of reference, the good position, that is the vertical position for growing wheat and the Exterior is "non Y" that is the horizontal position, which is the wrong position as far as growing wheat is concerned.
- *iš* means that X is located by the Exterior of Y: in other words *iš* reconstructs the process of lying expressed by *gulti* as a bad position, hence the notion of deterioration.

With this functioning of *iš*-, one understands why mainly names of plants can stand as the subject of the verb *išgulti*: one can hardly think of something other than plants for which it has been necessary to conceive the lying position as the wrong position.

The Schematic Form of the relator $i\check{s}$ is at stake in all the uses of the prefix $i\check{s}$ -, even in the cases when $i\check{s}$ - is considered as purely grammatical (value end of the action). In this regard, it is noteworthy that all the verbs taking the prefix $i\check{s}$ - to construct their perfective counterpart have something in common: they all express in one way or another an evolution until a final point (see the list of verbs in (11)): (11) kepti/iškepti (to bake/to bake_{perf}), tirpti/ištirpti (to thaw/to thaw_{perf}), virti/išvirti (to boil/to boil_{perf}), skalbti/išskalbti (to wash/to wash_{perf}), aušti/išaušti (to cool/to cool_{perf}), gesti/išgesti (to extinguish/to extinguish_{perf}), balti/išbalti (to whiten/to whit-en_{perf}), augti/išaugti (to grow/to grow_{perf}), etc.

As we can see, $i\bar{s}$ - is considered as semantically empty in the cases when there is a semantic coincidence with the verbal base: indeed, the verbal bases concerned here all take into account two states, which echoes with the semantics of $i\bar{s}$.

1.2. The preposition *iš*

Given the lack of space, we will only underline some constraints of use of the preposition that the schematic form of *iš* makes it possible to account for.

1.2.1. Spatial value

The schematic form of *iš* posits that X takes its origin in the Interior of Y. This intrinsic relation between X and the interior of Y explains, among others, the difference of meaning of prepositions *iš* and *nuo* which both introduce a location of origin.

(12) Jis pradėjo <u>dažyti</u> <u>sien-q</u> <u>nuo/iš</u> <u>apačios</u>! paint-INF wall-ACC.S <u>nuo/iš</u> bottom 'He started to <u>paint the wall from the bottom</u>!'

With preposition *iš*, there is a cohesion between the agent (X) and the location introduced: the bottom (Y) has then to be the place where the painter is at the beginning, and we must then imagine an open duplex or a mezzanine, where the painter will have started to paint the wall on the lower storey before going to the upper floor to paint the upper part of the wall. Preposition *nuo* introduces an autonomous locator, which has no intrinsic relation with X: the location of the painter is thus not relevant, the bottom in question here is simply the bottom of the wall, and there is no constraint on the type of room involved.

1.2.2. Causal value⁴

This difference of functioning between the prepositions *iš* and *nuo* also explains the difference in their distribution when they introduce a cause. Whereas almost any type of cause is possible with *nuo*, which introduces an autonomous element, with *iš* the external causes are impossible: the term introduced by *iš* necessarily refers to an emotion, a sensation, a feeling or a psychological trait of the subject of the predicate (ex. (13); see also ex. (14) where *nuo* is employed and *iš* is not possible to use):

- (13) Jis mirė nuo /*iš gripo, nuo/*iš peilio dūrio, nuo /*iš chirurgo kaltės, <u>nuo/iš bado, nuo/iš šalčio</u>
 'He died of the flu⁵, stab, by the fault of the surgeon, <u>of hunger, of cold</u>'
- (14) Jonas apsvaigęs nuo/*iš ją užpludusio džiaugsmo. Jonas drunk nuo/*iš her-ACC invade-PP joy 'Jonas is drunk with the joy that had invaded her.'

With $i\check{s}$, Y is necessarily a property of the subject (X), emotion, sensation or internal stake like hunger or cold, because of this intrinsic relation between X and the interior of Y posited by $i\check{s}$. Then, saying that X is located by the Exterior of Y has to be understood abstractly: the death is an externalization of the hunger or the cold felt by X.

1.2.3. Manner value⁶

Finally we'll come back to example (3), repeated here as (15), to show how the schematic form of *iš* accounts for this type of value.

(15a) <i>Iš</i>	veido	ji	gana	graži.
iš	face	she	rather	pretty
'As fa	r as her face	is concei	rned, she is ra	ther pretty.'

^{4.} For a detailed analysis of this question, see de Penanros 2013c.

^{5.} A disease is an external element in that it is 'caught' by the patient, it has an autonomy as it can be contagious, it can spread in the body in its own way.

^{6.} The denomination of this value used in dictionaries and lists of values will not be discussed here.

(15b) <i>Ji</i>	turi	gražų	veidą.
she	has	pretty	face
'She has	a pretty i	face.'	

In (15a), the prepositional phrase introduces the source of the beauty this sentence is about.

The particularity of such statements with preposition *iš* is that one does not consider only the mentioned body part: the beauty of the face is taken into account in opposition with the other parts of the body, which cannot be qualified as "pretty". We can compare (15a) with (15b), where the rest of the body is not relevant: on the contrary, in (15a), it is as much about the relative beauty of the face as about the possible "non-beauty" of the other body parts.

In this case,

- Y corresponds to *veidas* ('face')
- X corresponds to *ji* ('she').
- X is related to the Interior of Y (it is <u>her</u> face)
- *Iš* means that Y (*veidas*) is not considered as such (I) but from the point of view of what is not the face (E), that is of the other parts of the body: X is located by the face, which is considered in the opposition with the other body parts.

2. The partitive and elative suffixes in Finnish

With regard to the partitive and elative case suffixes in Finnish, we propose that the function of relator is assumed by the element -(t)A present in both of them:

Hereafter, we will compare some uses of the partitive and elative cases in similar contexts. Our aim is to see how the abstract Schematic Form defined in the introduction and applied above to the analyses of the element *iš* in Lithuanian allows us to account for various values expressed by theses markers. Moreover, we will propose a definition of the semantic value of the *s*-component in the elative suffix.

2.1. Material continuity between X and Y

Let us begin with examples (17a) and (17b) in which a relation is established between the base of the partitive and elative suffixes kak(k)u- 'cake' (Y) and the noun *pala-n* 'piece_{GEN}^{'9} (X) without the intervention of any other predicating element. The element X is located relative to the notional domain Y which is conceived as a qualitative state of X ("X's consistency", here "being cake").

The element -(t)A of the partitive and elative suffixes is a relator that divides Y in two zones, Interior and Exterior, and marks that X, which is originally associated with Y's Interior, is located by its Exterior. In (17a) and (17b), X is an incarnation of Y, extracted from it:

(17a) <i>Söin</i>	pala-n	kakku-a.	
eat-PRET-1	piece-GEN	cake-PAR	
'I ate a piec	ce of cake.'		
(17b) <i>Söin</i>	pala-n	kaku-sta.	
eat-PRET-1	piece-GEN	cake-ELA	
'I ate a piece of (this/that) cake.'			

The difference between the partitive and the elative cases concerns the way the domain Y is constructed. With the partitive suffix, based on the relator -(t)A which is directly attached to the base, the domain Y (corresponding to the notion of "being cake") is exclusively taken into account from a qualitative point of view¹⁰. Only the element X

⁽¹⁶⁾ partitive: -(*t*)A⁷ *elative: -stA* < -*s*- + -*tA*⁸ (cf. Leino 1989: 198)

^{7.} Phonetic erosion explains the existence of a short form of the partitive suffix (-A).

^{8.} The third case marker containing -tA, the ablative suffix -ltA will not be treated here due to the limited extent of this paper.

^{9.} The genitive form of *pala-n* can be explained by the function of this element in the construction of the verb *syödä* 'to eat': the genitive marker serves to construct a discreet occurrence of the type "piece". As a consequence the process is conceived as bounded.

^{10.} Cf. Leino (1999: 293) who speaks about "an unanchored and unquantified type specification".

(lexicalized by *pala(-n)* 'piece') forms a quantitatively bounded instantiation of the notion of "being cake". The domain Y thus constitutes a *dense*, i.e. unindividuated notion, on which it is possible to implement operations of extraction (Culioli 1999: 14–15; Paillard 2006).

The elative suffix, on the other hand, is a composed suffix: in addition to the relator -tA, it contains the element *s* which serves to construct a discreet, quantitatively bounded occurrence of the type 'being named "cake". So, with the elative case, the domain Y exists independently of X: the expression in (17b) actualizes two entities, the cake (Y) on the one hand, and a piece (of this cake) (X) on the other hand¹¹.

It is worth noting that in this kind of relation, when the partitive suffix is used, X is not always represented by a lexical unit:

(17c) <i>Söin</i>	[X]	kakku-a.
eat-PRET-1	[X]	cake-PAR
'I ate (some :	= an un	specified quantity of) cake.'

In examples like (17c), the partitive complement (*kakku-a* 'cake_{PAR}') is usually analyzed as an object which denotes an imprecise quantity. However, it would be more exact to consider that the partitive complement denotes the notional domain Y by which the object argument ("what I ate" = X) is located in order to attribute it a qualitative determination: X (="what I ate"), which has here no quantitative or qualitative determination of its own, is an instantiation of the notion of "being cake".¹²

Examples (18a) and (18b) contain a verbal predicate which is involved in the expression of the relation between X and the domain Y:

(18a)	Juhlaraha	on	tehty	hopea-sta.
	commemorative coin	be-3	do-PP.PAS	silver-ELA
	'The commemorative of	oin is ma	de of silver.	*

^{11.} See for instance Leino (1999: 247–275, 294–295) and ISK (2004: § 592) for different types of expressions used to lexicalize X according to whether the domain Y is quantitatively bounded or not.

Pöydälläoli[X]kakkuatable-ADEbe-PRET-3[X]cake-PAR'There was (some) cake on the table.'

(18b) Sormus	on	hopea-a.
ring	be-3	silver-PAR
'The ring is	s silver.'	

We can note that the elative case combines with verbs that imply a process of elaboration in which the term denoted by the base of the suffix *-stA* plays a participant's role. In (18a), with the verb *tehdä* 'to do', the *s* of the elative suffix serves to construct the domain Y as a discreet occurrence of the notion of "being silver": Y has a spatio-temporal anchoring, in so far as it constitutes the material used in the manufacture of the commemorative coin. The relator *-tA* indicates that the domain Y is divided in two zones, Interior and Exterior, and posits that X¹³ ("commemorative coin"), while initially associated to I, is located by E: X is a result of a process which consists in giving form to a substance ("silver"). The discreet nature of Y implies here a temporal and a notional distance between X and Y.

Example (18a) can be compared to (18b) which contains the partitive case and the copula *olla* 'to be'. Unlike the elative marker, the partitive suffix does not allow to construct the domain Y as a discreet occurrence. As in (17a), the base of the partitive suffix denotes a notion ("being silver") which is only qualitatively defined and of which X constitutes an incarnation. Since the domain Y is neither accessible nor tangible, the relation between X and Y can be characterized as a representation.

This idea of "representation" is lexicalized by certain verbs taking a partitive complement, for instance *edustaa* 'represent' in (19a) and *muistuttaa* 'resemble' in (19b):

(19a)	<i>Menneinä</i>	<i>vuosisatoina</i>	<i>kirjat</i>	edustivat
	past-PL-ESS	century-PL-ESS	book-PL	represent-PRET-3.PL
	<i>aikansa</i> era-GEN.POS. 'In the past of their era.'	centuries, books	y-PAR	the high technology

(19b) *Tyttö muistuttaa äiti-ä-än.* girl resemble-3 mother-PAR-POS.3 'This girl resembles her mother.'

^{12.} The same analysis applies to the "partitive subject" of the so-called 'existential sentence':

^{13.} Syntactically X is here the object argument of the verb.

2.2. Causal value

When the element X is the support of a process (i.e. an element involved in the verbal predicate), the source of determination the domain Y provides it with can take a causal value (cf. ex. (13) above):

(20a) Koir a_i kuoli vanhuut-ta- an_i . dog_i die-PRET-3 oldness-PAR-POS. 3_i 'The dog died from old age.'

(20b) *Lapsi tärisi kylmä-stä.* child shiver-PRET-3 cold-ELA 'The child was shivering with cold.'

In (20a), the base of the partitive suffix is a noun of quality *vanhuu*-'oldness', formed on the adjective *vanha* 'old' with the suffix *-Us*. The partitive suffix is followed by the possessive marker (*-an*) which is referentially linked to the subject of the sentence. The domain Y thus corresponds to a property of the subject. X is lexicalized by the subject as a participant involved in the verbal predicate, *kuolla* 'die'. The partitive suffix *-tA* establishes a relation between X ("the dog's death") and the domain Y ("the dog's old age"), divided in I and E. More precisely, *-tA* indicates that X, which originates from Y's Interior, is located by E: the dog's death is a manifestation, an exteriorization of its old age.

The same type of analysis is applicable to (20b). The element *-tA* of the elative suffix sets up a relation between X and Y. X is the subject *lapsi* 'child' as a support of the verbal predicate *täristä* 'shiver'; Y is the domain lexicalized by the base of the elative suffix, *kylmä-* 'cold'. *-tA* indicates that X, which is originally associated with Y's Interior ("the cold is felt by the child"), is henceforth located by Y's Exterior: "shivering" constitutes the effect caused by the cold on the child.

As in the examples presented in 2.1., the s of the elative suffix serves to discretize the notional domain Y, that is to construct an occurrence of the notion of "being cold". It follows from this that the domain Y has an autonomy with respect to X, the term to be located. By contrast, in the case of the partitive suffix, the domain Y is not presented as accessible as such. It corresponds to an inherent quality of the subject (X) which is exteriorized by the process affecting X.

In contemporary Finnish, the productive use of the partitive to express the causal value is limited to the possessivized quality nouns formed with the suffix *-Us* (Penttilä 1963: § 262; Leino 1991: 61–63; ISK 2004: § 997)¹⁴. The expression of the causal value by means of the elative case is not constrained in the same way. Terms in the elative case are not possessivized (see examples in Penttilä 1963: § 276.16). In other words, the initial association between X and the Interior of the domain Y is not due to an inherent link, but to an occasional contact between X and Y (see the idea of a child feeling the cold in (20b)).

2.3. Affected part

In examples (21a) and (21b), the element -(t)A has a functioning similar to that of the preposition *iš* in (15a) above:

(21a) Takki	oli	taka-a	likaine	n.
coat	be-pret-3	behind-PAR	dirty	
'The coa	t was dirty at	t the back.'		
(21b) Housut	olivat	polv	∕-i-sta	kulune

21b) *Housut olivat polv-i-sta kuluneet.* pants(-PL) be-PRET-3.PL knee-PL-ELA worn out-PL 'The pants were worn out at the knees.'

The bases of the suffixes with -(t)A correspond to the domain Y, in (21a) *taka*- 'behind [back]' and in (21b) *polvi*- 'knees', which have a part-whole relation with the subject of the sentence (20a: *takki* 'coat'; 20b: *housut* 'pants'). X is a quality ("being dirty", "being worn out") whose support is the subject. The element -tA divides the domain Y in two zones, Interior and Exterior, the latter corresponding here to the whole to which the domain Y belongs. -(t)A indicates that X which is *a priori* related to Y's Interior ("the part") is drawn out of this zone in

Mitä sinä itket? what-PAR you cry-2 'Why are you crying?'

The suffix *-tA* attached to the interrogative base *mi*- locates X ("your crying") relative to the domain Y which is qualitatively and quantitatively unspecified.

^{14.} Among the unproductive causal uses of the partitive we can mention the interrogative element *mi-tä*:

order to have the Exterior ("the whole") as a support. To put it differently, the quality attached to the subject ("the whole") in the attributive construction (*takki oli likainen* 'the coat was dirty'; *housut ovat kuluneet* 'the pants were worn out') can only be verified by considering a specific part of the subject¹⁵.

So, in these examples, the domain Y constitutes a part of a whole. The elative suffix is used to denote discreet notions, like the knees of pants. The use of the partitive suffix is limited to some terms denoting relational notions, as, for instance, *taka-a* 'behind_{PAR}'; *ulko-a* 'outside_{PAR}'; *al-ta* 'under_{PAR}', *sisempä-ä* 'inner_{PAR}'¹⁶, etc. These notions are interpreted with regard to a landmark and can not construct discreet occurrences¹⁷.

2.4. Virtual relation

In all the examples seen above, X constitutes, in one way or another, an extension of the domain Y which provides it with a source of determination. This final part deals with a different case.

In (22a), the relator -(t)A is combined with the verbal predicate *paeta* 'to flee'. Owing to the lexical meaning of the latter, the domain Y is characterized by the notion of threat:

(22a)	Sadat	islantilaiset	pakenivat
	hundred-PL	Icelandic-PL	flee-pret-3.pl
	purkautu-va-a	tulivuor-ta.	
	erupt-PRESP-PAR	volcano-PAR	
	'Hundreds of Icelan	nders fled an erupt	ing volcano.'

15. Cf. For the terms *partitivus* and *elativus respectus* used in the grammatical tradition, see for instance Penttilä 1963: § 262.6, § 276.21.

16. When used as a complement of a verb of movement like tulla 'to come', the relational terms take a spatial value (see the introduction of this paper):

Mansikanpoimijattulevatkauka-a.strawberry picker-plcome-3.PLfar away-PAR'The strawberry pickers come from far away.'

17. The term to which a quality is attached can also be lexicalized by a possessivized partitive form like *alku-a-an* 'from origin' or *synty-ä-än* 'from birth':

Hänonalkuaan ~syntyäänsuomalainen.s/hebe-3origin-PAR-POS.3birth-PAR-POS.3Finnish'S/he is Finnish from origin.' (Penttilä 1963: §262.6)

The element X (subject of the verb) is put in relation with the domain Y denoted by the base of the partitive suffix. This domain, conceived as a threat, a danger, is qualitatively defined as an "erupting volcano". The relator -(t)A indicates that 1) X is *a priori* associated with Y's Interior, that is threatened by it, and 2) X is located by Y's Exterior. The verb *paeta* 'to flee' thus expresses a process which consists in avoiding Y's Interior, in keeping away from it, in other words, in remaining in Y's Exterior (out of threat, out of danger).

In this case, the initial association of X with Y's Interior is only virtual (not real). Consequently, the domain Y is not actualized directly: it is taken into account solely from the point of view of X situated in its Exterior zone¹⁸.

We can note, in this respect, that the use of the elative suffix in the construction of the verb *paeta* 'flee' has the effect of endowing the domain Y with a spatial value and attributing it a participant's role (cf. (17b) above):

(22b) Lapset	pakenivat	pala-va-sta	bussi-sta.
child-PL	flee-pret-3.pl	burn-PRESP-ELA	bus-ELA
'The child	ren escaped from	n a burning bus.'	

In (22b), the element *s* of the elative suffix is used to construct a discreet occurrence of an entity presenting a danger and conceived as a location. The process expressed by the verb *paeta* 'flee' is interpreted as a "movement away" ('to leave (rapidly) a place in order to escape from a danger'). The Interior of Y corresponds to the initial location of X, the Exterior to its location after being involved in the process.

A configuration comparable to that of example (22a) in which the association of X with the Interior of the domain Y is only virtual can also be found in some uses of the elative suffix, as in example (23):

Sadat islantilaiset pakenivat *purkautu-va-n tulivuore-n. hundred-PL Icelandic-PL flee-pret-3.PL erupt-PRESP-GEN volcano-GEN

^{18.} The partitive complements are usually analyzed as objects (see also 17c). Nevertheless, the aspectual and quantitative oppositions that are supposed to be expressed by the case-marking of the object (opposition between partitive object and total object in the nominative or genitive case) are not possible with the verb paeta 'to flee' which can not take a "total object":

(23) *Myöhästyin juna-s-ta.* be late-PRET-1 train-ELA 'I missed my train.'

In (23), the verb *myöhästyä* expresses the idea of "being [somewhere] after the time planned". The base of the elative suffix denotes the domain Y which corresponds to the situation of X, the subject of the verb. The element *s* of the suffix *-stA* allows to construct a discreet occurrence of the notion "train" which has a spatial value and to which is associated a temporal boundary ("train with a precise departure time"). The element *-tA* indicates that X for which the Interior of the domain Y constitutes a target ("to be on the train before departure") is located by the Exterior ("not to be on the train that has left").

This idea of non-fulfillment of an aim also characterizes the use of the elative case with verbs like *puuttua* + ELA 'to lack', *kieltäytyä* + ELA 'to refuse', *estää* + ELA 'to prevent' (see Penttilä 1963: § 276.7, § 276.8).

3. Conclusions

The analyses we have presented here deal with the semantic identity of two markers, the verbal prefix and preposition *iš* in Lithuanian, and the element -(t)A of the partitive and elative suffixes in Finnish. We have argued that these elements are *relators* which establish a non symmetrical relation between two terms X and Y, the latter being the source of the determinations of X.

The semantic identity of $i\check{s}$ and -(t)A can be defined by means of a Schematic Form based on the idea of an abstract operation of location: one term is located relative to another.

Our purpose was to show that the Schematic Form we defined allows to analyze the use of $i\bar{s}$ and -(t)A in different syntactic and lexical contexts without positing the primacy of one kind of use over another. More precisely, we have defended the idea that the spatial value these elements may express is only one value among others, and that when it appears, there is another predicative element in the context (like a verb for instance) contributing to the spatial meaning. Basing our analyses on formal criteria and considering that the semantic identity of the forms is valid whatever their contexts of use made it possible to examine in parallel units that are usually the object of separate analyses (verbal prefixes and prepositions, as well as semantic and grammatical values of theses elements in Lithuanian; so called grammatical and semantic cases in Finnish).

Still, the analyses presented in this paper are only the first step of a comprehensive study in which we should examine systematically a representative selection of the different attested uses of each form (for the verbal prefix *iš*, see de Penanros 2010, for the preposition *iš* see de Penanros 2013b and 2013c).

Our aim was also to present theoretical tools, which allow to account for the ways languages may express exteriority. The four markers we studied implement it in a specific way, which allow them to coincide locally but the overlap between them is only partial. Each marker has an identity which is specific and can not be assimilated to that of the other.

Finally, the approach proposed here is a part of a more general reflexion concerning the definition of linguistic categories. Once we have defined the semantic identity of a marker, another question is to be tackled, namely that of its categorial identity as verbal prefix, preposition or case suffix.

List of glossing abbreviations

ACC GEN ELA INF	accusative genitive elative infinitive	POS PP PRESP PRET	possessive marker past participle present participle preterite
PAR	partitive	S	singular
PAS	passive	1	first person
PAST	past tense	2	second person
PERF	perfective	3	third person
PL	plural		

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Skemaattinen muoto teoreettisena työkaluna prepositioiden, verbiprefiksien ja sijatunnusten analyysissa suomessa ja liettuassa

Outi Duvallon & Hélène de Penanros

Tässä artikkelissa, jonka viitekehyksenä on enonsiatiivisten operaatioiden teoria (Culioli 1990, 1999), tarkastellaan kysymystä prepositioina, verbiprefikseinä ja sijapäätteinä toimivien kielenainesten semanttisesta identiteetistä. Kirjoittajat määrittelevät tällaiset kielelliset merkitsimet relaattoreiksi, jotka rakentavat luonteeltaan abstraktin paikannussuhteen kahden termin, X:n ja Y:n välille: kyse on X:n paikannuksesta suhteessa Y:hyn. Ajatusta havainnollistetaan analysoimalla kahta, typologisesti erilaisiin kieliin kuuluvaa ainesta: liettuan kielen iš, joka voi olla sekä verbiprefiksi että prepositio, ja suomen kielen -(t)A, joka on paitsi partitiivisijan tunnus myös osa elatiivisijan tunnusta -stA. iš- ja -(t)A-ainesten ilmaiseman relaation analyysissa käytetään työkaluna skemaattista muotoa, jonka avulla voi määritellä kielenyksikön semanttiset merkityspiirteet riippumatta sen kategorisesta statuksesta tai käyttökonteksteista. Kirjoitus poikkeaa monista prepositioiden, verbiprefiksien ja sijatunnusten semantiikkaa koskevista tutkimuksista siinä, että se ei aseta konkreettista, spatiaalista merkitystä ensisijaiseksi suhteessa muihin merkityksiin. Skemaattisen muodon avulla kuvattua is- ja -(t)A-ainesten merkityspotentiaalia voi luonnehtia ulkoisuuden (exteriority) käsitteellä. Yhtäältä liettuan prepositio iš ja verbiprefiksi iš sekä toisaalta suomen partitiivisijan tunnus -(t)A ja elatiivisijan tunnus -stA edustavat tätä käsitettä jokainen omalla erityisellä tavallaan: vaikka niiden merkitykset osuvat paikoin yksiin, niillä on kullakin oma, toisista erottuva identiteettinsä.

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