# BALTIC AND FINNIC LINGUISTIC RELATIONS REFLECTED IN GEOLINGUISTIC STUDIES OF THE BALTIC LANGUAGES

#### Anna Stafecka

Latvian Language Institute of the University of Latvia, Riga

**Abstract.** The article provides insight into the reflection of Baltic and Finnic language contacts in geolinguistic studies of the Baltic languages. These contacts have a rather long history, and are particularly intense between the Latvian language and Finnic languages (especially Livonian and Estonian). In Lithuanian, Finnic borrowings have mostly appeared through Latvian, and fall into the dialectal Lithuanian vocabulary. The analysed material makes it possible to distinguish several areas of Finnic influences in Latvian sub-dialects. They are as follows: 1) the territory of the Livonian dialect which originated from Latvian-Livonian contact; 2) the sub-dialects along the Estonian border; 3) the sub-dialects around Gulbene and Alūksne; 4) the territory of the *krieviņi* (descendants of people who spoke Votic) in the Zemgale region; and 5) the sub-dialects in the Latgale region around Ludza. Geolinguistic research on language contacts may be helpful in solving certain problems of ethnic history.

**Keywords:** dialectology, geolinguistics, Baltic-Finnic language contacts, dialectal atlases

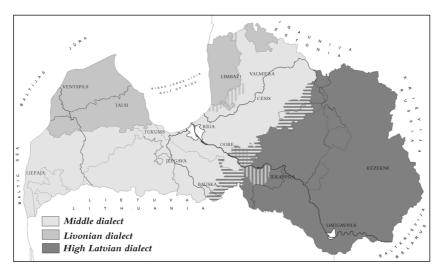
**DOI:** http://dx.doi.org/10.12697/jeful.2014.5.2.06

#### 1. Introduction

The languages spoken in the Baltic countries belong to different language families: while Estonian belongs to the Finno-Ugric family, Latvian and Lithuanian belong to the Indo-European language family, more precisely, the Baltic language group. However, contacts between the Baltic languages and some of the Finno-Ugric languages have been rather close and, moreover, they have quite a long history.

The contacts between Baltic and Finnic ethnic groups influenced the development of their respective languages, and they have a number of mutual borrowings from different epochs. The Lithuanian linguist K. Būga has pointed out that among the Indo-European borrowings in

Finno-Ugric languages, those of Lithuanian origin are older than those of Germanic origin (Būga 1959 [1922]: 82).



**Figure 1.** Dialects of the Latvian language.

The Latvian language, due to its close contacts with Livonian and Estonian, has been influenced by Finnic languages much more than Lithuanian has. The territory of contemporary Latvia was inhabited not only by Baltic tribes (Curonians, Semigallians, Latgalians and Selonians), but also by the Finnic-speaking Livonians (the other autochthonous nation in Latvia besides Latvians). The formation of the Latvian language, as the Baltic tribes consolidated, began during the 10-12th centuries. However, traces of tribal languages can still be found in the Latvian dialects, which encompass more than 500 various sub-dialects. The Latvian dialects are the Middle dialect (vidus dialekts), the Livonian dialect (*lībiskais dialekts*; in English also called the Livonianized dialect, not to be confused with the Livonian language) and the High Latvian dialect (augšzemnieku dialekts) (see Fig. 1)<sup>1</sup>. The Middle and High Latvian dialects have been influenced by the languages of the ancient Baltic tribes – Curonians, Semigallians, Latgalians and Selonians – but the Livonian dialect of Latvian has

The maps are made on the basis of the maps of the Dialectal Atlas of Latvian. Vocabulary (LVDA) and the *Atlas of the Baltic Languages*. *A prospect (ABL 2009)*. Electronic versions of the maps have been made by Liene Markus-Narvila.

been influenced not only by Curonians, but also by the Livonian language of the Finno-Ugric family.

According to the information provided by www.livones.lv, a website dedicated to the Livonian language and culture, in 2010 there were about 40 people in the world who could communicate in Livonian, of which only about half were of Livonian origin.

During recent decades some monographs and dictionaries have been dedicated to Livonians (Lībieši (1994), SLW, Blumberga et al. 2011, and Blumberga et al. 2013).

The Lithuanian language has two main dialects: Aukshtaitian and Zhemaitian (see Fig. 2). Lithuanian dialects are also divided into groups of sub-dialects, containing more than 700 smaller dialectal units.

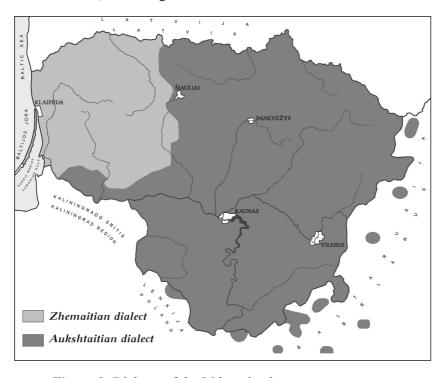


Figure 2. Dialects of the Lithuanian language.

#### 2. Some notes on research on Baltic and Finnic language contacts

Lexical borrowings from Finnic (mostly Estonian and Livonian), as pointed out by the Latvian linguist Ojārs Bušs, "have been researched at a more or less serious scientific level for more than a hundred years" (Bušs 2009b: 31). There are several monographs devoted to the lexical contacts between the Baltic group of the Indo-European family and the Finnic group of the Finno-Ugric family. One of the most well-known is the 1890 book by the Danish linguist Vilhelm Thomsen (Thomsen 1890), in which he identifies and analyses the contacts between Finnic and Baltic languages, mentioning, among other things, about 180 Finnic borrowings in Latvian. An important contribution to the study of Baltic and Finnic contacts has been provided by Lauri Kettunen (Kettunen 1938), Jānis Endzelīns (ME, EH), Karl Aben (Aben 1957), Valdis Juris Zeps (Zeps 1962), Eberhard Winkler (Winkler 1997), Lembit Vaba (Vaba 1997) et al. Significant works on the subject have also been written by the Latvian linguists Marta Rudzīte, Silvija Raģe, Ojārs Bušs, Antons Breidaks, Elga Kagaine, Benita Laumane, Ilga Jansone, Kersti Boiko et al. (for more on this, see Bušs 2009a: 10-11).

As noted above, Latvian has much more Finnic influence than Lithuanian does. For instance, the first-syllable stress in Latvian is due to Finno-Ugric influence. Testimony to contacts with Finno-Ugrians can also be found in many toponyms and hydronyms in Latvia. Thus, for instance, the names of towns and other settlements containing -aži, -eži, -iži, -uži (Limbaži, Vidriži, Ainaži, Kuiviži etc.) are of Finnic origin. It is believed that in the Latvian language there are about 500 borrowings from Finnic languages, both in the standard language and dialectal vocabularies. In Standard Latvian one can find such wellestablished Finnic borrowings as māja 'house' (cf. Liv. mōj, Est. maja), puika 'boy' (cf. Liv. pūoga, Est. poeg 'son'), pīlādzis 'mountain ash' (cf. Est. pihlakas, Liv. pī'lõg), sēne 'mushroom' (cf. Liv. sēn, Est. seen), vajag 'it is necessary' (cf. Liv. vajāg, Est. vaja) etc. (for more on this, see Rudzīte 1994: 291-292). In the study of Finnic borrowings in the Latvian dialectal vocabulary, the works of E. Kagaine have been a major contribution in recent years (Kagaine 2004). On the basis of dialectal research, O. Buss has estimated the number of Finnic borrowings in Latvian to be approximately 600 (Bušs 2009c: 30).

There are far fewer Finnic borrowings in Lithuanian, and most of them have been borrowed through the Latvian language. Algirdas Sabaliauskas gives such examples as *burė* 'sail' (cf. Latv. *bura*, Est.

puri, gen. purje, Fin. purje), kadugys, kadagys 'juniper' (cf. Latv. kadiķis, kadeģis, Fin. kataja, Est. kadakas, Liv. gadāg), laivas 'boat' (cf. Latv. laiva 'boat', Fin. laiva, Est. laev 'ship'), rija 'threshing barn' (cf. Latv. rija, Liv. rī' (Kettunen 1938: 339), rī'j (Viitso, Ernštreits 2012: 268), Est. rehi, dial. riha, Fin. riihi), kozos 'wedding' (cf. Latv. kāzas, Liv. kōzgōnd), puišis 'young man, boy' (cf. Latv. puisis, Liv. pois), launagas 'afternoon meal' (cf. Latv. launags, Liv. lōinag 'south', lōinagizt 'lunch', Est. lōuna 'south; lunch (at noon)') and muižė 'manor house' (cf. Latv. muiža, Liv. moizō (Viitso, Ernštreits 2012: 194), Est. mōis, Fin. moisio) (for more on this, see Sabaliauskas 1990: 224–227, 268–275). As seen from the Latvian examples, these words belong to the standard vocabulary, while in Lithuanian most Finnic borrowings are part of the dialectal vocabulary, and are not very widespread.

It is thought that there are more Baltic borrowings in Finnic languages than the other way round. M. Rudzīte mentions the number estimated by Seppo Suhonen: 2534 Latvian borrowings in the Livonian language. For instance, Liv. zi'bbō 'to flash' (cf. Latv. zibēt), Liv. ougļōz 'fruit' (cf. Latv. auglis), Liv. takā 'footpath' (cf. Latv. taka) and Liv. balad 'pigeon' (cf. Latv. baluodis) (Rudzīte 1994: 302).

#### 3. Geolinguistic research on Baltic and Finnic relations

The areas of language contacts and genetic relations are best represented by geolinguistic maps. Therefore, it is necessary to take a look at the history of the geolinguistic research on both Baltic languages. It began in earnest in the second half of the 19th century, while some information about the regional differences of these languages appeared as early as the 17th century, in Latvian and Lithuanian grammars and dictionaries, such as the dictionary *Lettus* by Georg Mancelius (Mancelius 1638), and the Lithuanian grammar by Daniel Klein (Klein 1653).

The first geolinguistic maps of both languages were created and published in the late 19th century. The first such map of the Lithuanian language was created by Friedrich Kurschat in 1876, and was published in his book *Grammatik der littauischen Sprache* (Kurschat 1876). In this map, he distinguishes the two main Lithuanian dialects: Zhemaitian/Samogitian and Aukshtaitian. The first Latvian geolinguistic map was published in 1892, and its author was the Baltic German clergyman August Bielenstein. This map appears as an appendix

to his book *Die Grenzen des lettischen Volksstammes* ... (Bielenstein 1892). With the help of 33 isoglosses, it mostly shows phonetic and morphological features of Latvian sub-dialects. Some isoglosses are devoted to sub-dialects of the Livonian dialect, e.g., isogloss nr. 1 shows the loss of final syllables, nr. 12 the loss of verb endings expressing person, and nr. 13 the loss of feminine gender. Nowadays these maps provide an important source for studies of historical dialectology.

In the second half of the 19th century, when collecting ethnographic materials and research on local linguistic features became popular in Europe, the first projects for gathering Latvian and Lithuanian immaterial culture were initiated as well. However, for more than a century the dialectological research on Latvian and Lithuanian has proceeded in parallel, but separately, without creating a joint project for gathering dialectal material.

A new epoch in the study of Latvian and Lithuanian sub-dialects began in the 1950s, when it was decided to publish atlases of both languages. However, only some of the questions used in the collection of materials for Latvian and Lithuanian linguistic atlases were identical. A joint project for dialectal research was first developed in the second half of the 20th century, according to questionnaire nr. 1 of the *Atlas Linguarum Europae* (ALE 1973).

Dialectal maps can provide more thorough information about the distribution of certain linguistic phenomena. In the late 20th century, dialect atlases of both Latvian and Lithuanian were published (LKA, LVDA).

Of the two surviving Baltic languages, the Latvian language has had the closest contact with Finnic languages, so it is logical that more research has been done on this topic. For instance, the book by the American-Latvian linguist Valdis Juris Zeps (1932–1996) *Latvian and Finnic linguistic convergences* (Zeps 1962) focuses on the Finnic borrowings (including hypothetical ones) in Latvian. Both the Standard Latvian and dialectal vocabularies are given, etymological data are summarized, and more than 150 geolinguistic maps are included. In addition, V. J. Zeps singled out several areas of Finnic borrowings and illustrated them with examples.

The distribution of Finnic borrowings in Latvian sub-dialects has also been reflected in more than 20 geolinguistic maps by E. Kagaine (Kagaine 2004). Her main area of research is the sub-dialects spoken in the region of northern Vidzeme, but she has also shown the distribution of certain words in a wider territory, thus complementing the

Maps of Finnic borrowings in Latvian have been drawn by B. Bušmane (Bušmane 2000), I. Jansone (Jansone 2004), K. Boiko (Boiko 1990) et al.

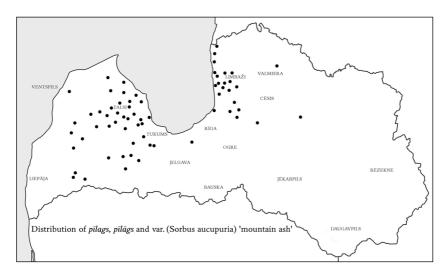
In 1999, the vocabulary volume of the Dialectal Atlas of Latvian (*Latviešu valodas dialektu atlants*, LVDA) was published, where the words denoting 119 various concepts in more than 500 Latvian subdialects were mapped and commented on, showing the use and distribution of more than 6600 words.

Since Latvian has been affected by Finnic languages more than Lithuanian has, it is the Dialectal Atlas of Latvian that demonstrates the largest number of Finnic borrowings. However, the number of words included in this atlas, and reflecting the contacts between the Latvian language and the Finnic language group, is relatively small: about 1.5%, according to B. Bušmane (Bušmane 2000: 201).

Among those, only two Finnic borrowings are Standard Latvian words:  $p\bar{\imath}l\bar{a}dzis$  'mountain ash (*Sorbus aucuparia*)' (LVDA, map 5–7) and *virca* 'dung wash, dung water' (LVDA, map 54), which are widely used in sub-dialects as well.

The word *virca* < Est. *virts*, Liv. *vīrtša* (LVDA, map 54) and its variants are most frequently observed in the sub-dialects of Vidzeme and Zemgale.

The most widespread in sub-dialects is the word  $p\bar{\imath}l\bar{a}dzis$ , and its almost 20 variants, of which the closest to Finnic origin is the word  $p\bar{\imath}lags < \text{Liv. } p\bar{\imath}lag$  (ME III: 231), cf.  $p\bar{\imath}'l\tilde{o}g$  (Viitso, Ernštreits 2012: 242), which has quite a compact area of distribution in the territory of the Livonian dialect in Kurzeme and Vidzeme (Fig. 3). The variant  $p\bar{\imath}l\bar{a}gs$  has been registered in western Zemgale. In south-eastern Kurzeme, the variant  $p\bar{\imath}l\bar{e}\dot{g}is$  has also been noted, but in north-western Vidzeme  $p\bar{\imath}len\dot{g}is$  has been detected. The word  $p\bar{\imath}l\bar{a}dzis$ , which belongs to the standard vocabulary, has been observed in sub-dialects mostly in Zemgale, western Kurzeme and eastern Vidzeme.



**Figure 3.** Distribution of  $p\bar{\imath}lags$  'mountain ash (*Sorbus aucu-paria*)'.

### 4. Thematic groups of Finnic borrowings reflected in the Dialectal Atlas of Latvian

#### 4.1. Flora-related thematic group

In the flora-related thematic group of the vocabulary, there are only a few Finnic borrowings. In north-eastern Vidzeme, the word *mustika* (< Est. *mustikas*) has been registered as the word for 'blueberry (*Vaccinium myrtillus*)', as well as the hybrid form *mustene*. The latter has been observed in Zemgale as well, in the *krieviņi* territory in Vecsaule (LVDA, map 24). *Krieviņi* (lit. 'little Russians') were the descendants of people who spoke Votic and were brought to Zemgale as prisoners of war by Germans in the 15th century, from the area of what is now St. Petersburg.

The dialectal name for a flax capsule, *kukurs* < Liv. *kukkõr* (ME II: 303), is used in northern Kurzeme, western Zemgale, and northwestern Vidzeme (LVDA, map 78).

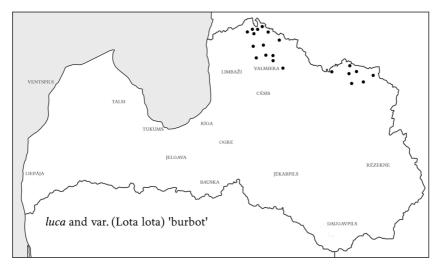
This thematic group also includes the dialectal word for tree fungus, *pese* < Est. *pess* (ME III: 202–203), observed in northern Vidzeme and in the area around Piebalga (LVDA, map 13).

#### 4.2. Fauna-related vocabulary

Several Finnic borrowings occur in fauna-related vocabulary as well.

One of the most widespread Finnic borrowings is *konna*, *kunna* 'frog (*Rana*)' (see LVDA, map 29). Less frequently observed have been its variants *konne* and *kunne*. This word, with its variants, occurs in a large compact area in north-western Vidzeme. In most sub-dialects there, a semantic differentiation is observed: *kunna*, *konna* is used to denote the grey or brown frog (*Rana temporaria*), but *varde*, which belongs to the Standard Latvian vocabulary as well, is used for the green frog (*Rana esculenta*).

In a small area in north-western Vidzeme, the word *luca*, *lucis*, *lucka* 'eel-pout (*Lota lota*)' < Est. or Liv. *luts* (ME II: 509) is used; see LVDA, map 35 (Fig. 4).



**Figure 4.** Distribution of *luca* 'eel-pout (*Lota lota*)' and variants.

In some north-eastern sub-dialects of Latvian, the variants *lučka* and *luce* have been registered. It should be mentioned that the Standard Latvian word *lucis*, *lucītis* denotes another type of fish: *Zoarces viviparus*.

In the same area, the word *sonnis* 'ram' < Liv. *sonn* (ME III: 980) and *sonķis* have been observed (see also, Estonian *sõńń* 'bull') (LVDA, map 51, Bušmane 2000: 203). Since in most parts of Latvia the words

for a castrated and non-castrated ram are different, *sonnis* is used for a non-castrated ram.

Sporadically registered, as shown by LVDA, map 33, is the dialectal name for a leech (*Hirudinea*), *pižers* (< Liv. *pizār*) in the Venta sub-dialect; the word *sizliņš*, cf. Est. *sisalik*, Liv. *šizāliki* (ME III: 850), *šizālikki*, *sižālikki* (Kettunen 1938: 395), *sižālikki* (Viitso, Ernštreits 2012: 295), meaning 'lizard (*Lacertidae*)', reflected in map 34 in Dundaga, and noted in north-eastern Vidzeme as well, in Veclaicene (Bušmane 2000: 209); and there is the dialectal name for jackdaw (*Corvus monedula*), *aķis* in Lejasciems (Zemzare 1940: 113), probably < Est. *hakk*.

#### 4.3. Vocabulary related to material culture

Latvian and Finnic contacts are also reflected in several other thematic groups. Most of them fall into the group containing vocabulary related to material culture (see Bušmane 2000: 201). Some of them are the appellatives of rather ancient items. Thus, for instance, when rye was harvested by hand, it was tied in sheaves and put in shocks. Latvian sub-dialects provide several names for the rye shock, among which three can be more or less hypothetically attributed to Finnic languages (see LVDA, map 41). A rather compact area in the northeastern part of Latvia uses the word *runiņa*, which might be a borrowing from the Russian dialectal word *runio* 'heap' (ME III: 562), but the relation with Estonian *rong* (gen. *ronni*, *ronna*) 'row, bundle' (Wiedemann 1893: 973) cannot be excluded either, taking into account the distribution of this lexeme in north-eastern Vidzeme.

In two sub-dialects near the Estonian border, spoken in Ipiķi and Terneja, the word *aķis* 'rye shock' (< Est. *hakk*) has been registered, and in Ipiķi it also has a diminutive form, *aķītis*. Since in the 1990s the word *aķis* was also observed in other sub-dialects further from the border. E. Kagaine believes that its area of distribution might have been larger at an earlier time (Kagaine 2004: 58).

The word *stuģis* 'rye shock' (cf. Est. *tugi*, Fin. *tuki* 'support') is known only from sources published earlier; it is mentioned as having been observed in Salaca, Ainaži and Svētciems, and possibly it has diverged from its basic meaning, which denotes a supporting structure of a boat (for more on this, see Kagaine 2004: 202).

A small elongated heap of hay in Latvian is called a *stirpa*, diminutive *stirpiṇa*. In northern Vidzeme and northern Zemgale, the variant

*tirpa*, *tirpiņa* is used (LVDA, map 69). According to J. Endzelīns, *tirpa* developed from *stirpa* under the influence of Finnic languages (ME III: 1074).

The word for the (weaving) loom, *kangas* < Liv. *kāngaz* 'cloth' (ME II: 154) is widespread in western Kurzeme. It has also been registered in north-eastern Vidzeme, in Veclaicene and Ziemeri, in the speech of the older generation (LVDA, map 81).

Two words denoting a part of the spinning wheel – *ķedriņš* (< Liv. *kie'ddõr* (Viitso, Ernštreits 2012: 116), Est. *keder*) and *ventīna*, *ventiņš* – have been registered in some sub-dialects of north-western Vidzeme. The word *venta* (< Est. *vänt*, Liv. *vent*), meaning 'handle, crank', has been observed in a wider area (Kagaine 2004: 228–230).

The remnants of melted lard, which in Standard Latvian is called *dradži*, has about 450 names in Latvian sub-dialects, two of which might be of Finnic origin. In north-eastern Vidzeme, the word *niras* has been observed (Fig. 5), which in the commentary of the map 73 of LVDA is etymologically related to the Estonian *nired*, with the same meaning, but there is also the word *razas*, *razīnes*, related to the Estonian *razu* 'fat' (Wiedemann 1893: 933; ME III: 492; cf. Standard Est. *rasu*), as well as the Estonian *rosinad* 'raisins'. Moreover, the word *niras* is used by the younger generation as well, even though they practically do not use the sub-dialect any more.

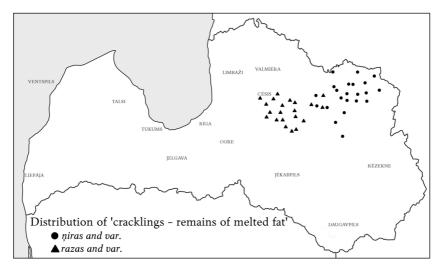


Figure 5. *niras* and *razas* 'remnants of melted lard'.

# 4.4. Lexical group describing the person as a physical and social being

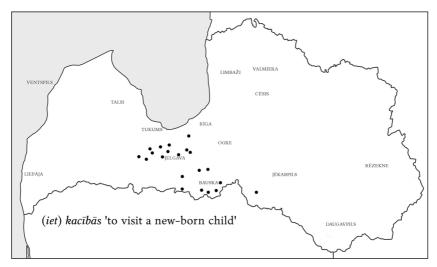
The thematic lexical group describing the person as a physical and social being presents at least four dialectal words of Finnic origin.

As an appellative for a person who is left-handed, in some High Latvian sub-dialects (mostly in central and eastern Latgale) the word *kete*, a metonymous derivation from *kete* 'left hand', is used. In these sub-dialects, the word *kete* is used in both meanings. It is considered to be borrowed from the Estonian word *käsi* 'hand; arm' (Brejdak 1970: 160). Several variants have been registered: *ketainis*, *ketaks*, *ketrinieks* etc. (see LVDA, map 91).

The word *tilkas* < Est. *tilk* 'drop' (ME IV: 188), denoting dripping saliva, has been observed in Zemgale, and less frequently in Kurzeme and Vidzeme (see LVDA, map 89).

Several north-eastern sub-dialects contain the collocation *iet*  $t\bar{u}k\bar{a}s/tuk\bar{a}s/tukuos$ , meaning 'to visit a newborn baby; to go to a baby shower' (LVDA, map 95), which is believed by J. Endzelīns to be a borrowing from the Estonian tuhk (ME IV: 255). Nearby, the variant *iet*  $st\bar{u}k\bar{a}s$  has also been registered, and it was initially associated by J. Endzelīns with the dialectal word  $st\bar{u}k\bar{s}s$  'a wrapped-up baby; a person in thick clothing' (ME III: 1109). However, in EH (EH II: 597), he points out the relation with  $t\bar{u}k\bar{a}s$  *iet*. An 18th-century dictionary contains the entry tukas dzert, with a similar meaning (Lange 1773: 360).

The collocation *iet kacībās* has been registered in Zemgale, forming a compact area around Bauska, in the *krieviņi* territory (Fig. 6).



**Figure 6.** *iet kacībās* 'to visit a newborn baby'.

## 5. Atlas of the Baltic Languages: reflection of Baltic and Finnic contacts

Since 2006, Latvian and Lithuanian dialectologists have been working on the joint project "Atlas of the Baltic Languages".

It was not by coincidence that this idea was conceived, because both published and unpublished Latvian and Lithuanian dialectal material collected so far, including the data for the *Atlas Linguarum Europae* (ALE), demonstrate many common features, indicating the necessity of studying both languages jointly from a geolinguistic perspective. The above-mentioned national atlases form the main basis for the joint project "Atlas of the Baltic Languages", the maps created for it showing the related lexical and sometimes semantic areas of the two surviving Baltic languages. In addition, the inspiration for this project was largely drawn from the *Atlas Linguarum Fennicarum* (ALFE), to be precise, the pilot volume of this atlas.

The material chosen for the Atlas of the Baltic Languages is not homogeneous; it was collected in different periods of time and for various purposes: for the Dialectal Atlas of Latvian (LVDA), Atlas of the Lithuanian Language (LKA) and Atlas Linguarum Europae (ALE). Since each of the atlases has a different network of sub-dialects, the number of the sub-dialects analysed also varied. While for the Dialectal Atlas of Latvian data were collected from 500 sub-dialects, for the Atlas of the Lithuanian Language they were from 720 sub-dialects (including 12 spoken in the Lithuanian "islands" in Belarus and one in Poland), and the questionnaires for the *Atlas Linguarum Europae* were filled in for only 36 sub-dialects in Latvia and 42 sub-dialects in Lithuania. Thus there are two types of maps in the Atlas of the Baltic Languages: those based on the national atlases, and those created using the ALE material. Needless to say, the amount of information in both types of maps differs greatly, and this problem was solved by creating additional maps for the better-investigated part of the linguistic material.

Since the vocabularies of the Baltic languages have quite a lot in common, the commentaries on the map of each thematic lexical group analyse words of general use common to both languages, including those that do not have dialectal variants, and those that do. In the Latvian and Lithuanian data, one can observe many semantic parallels and differences, which can help researchers of semantics to shed light on the development of word meanings. An attempt was made to show semantic parallels in the maps as far as possible, and to describe them in the commentaries.

In 2009, the pilot volume of the *Atlas of the Baltic Languages* was published, with 12 geolinguistic maps and their commentaries in Latvian, Lithuanian and English (ABL 2009). This volume presents the main thematic vocabulary groups (flora-, fauna- and material culture-related vocabulary), has a very large introduction describing the surviving and extinct Baltic languages, provides insight into the history of the dialectological research in Latvia and Lithuania, and describes the characteristic features and areas of distribution of Latvian and Lithuanian dialects, and the principles of elaborating the maps and commentaries.

In 2012, the first volume, *Flora*, of the *Atlas of the Baltic Languages* was published in the form of a CD (ABL 2012), and in 2013 an enlarged edition of the *Flora* volume was published as a book (ABL 2013).

The Atlas of the Baltic Languages (the pilot volume and the 1st volume, Flora) so far presents only a few words related to the Finnic languages, most of them in the Latvian language. As noted before, Lithuanian has far fewer Finnic borrowings. Only some of these have parallels in both Baltic languages. One of them is kadęgs, kadeģis 'juniper (Juniperus communis)', observed mostly in Kurzeme and Zemgale, and the corresponding Lithuanian word kadagỹs, kàdagis continues this area of distribution in the western part of Lithuania. It is widespread in the Zhemaitian sub-dialects, and occurs less frequently in the Aukshtaitian sub-dialects close to the Zhemaitian area. The border-zone western sub-dialects use the variants kadegỹs, kàdegis, kàdekis. Almost the whole western Aukshtaitian area around Kaunas uses kadugỹs, kàdugis.

This word is rather ancient and its origin has not been easy to determine. Since antiquity, it has existed in both the Baltic and Finnic languages. There are different opinions about the derivation of the Lithuanian *kadagys*, Latvian *kadiķis* and Prussian *kadegis*. Some linguists regard it as a Finnic borrowing (cf. Finnish *kataja*, Estonian *kadakas*, Livonian *kadāg*, *gadāg*, Vepsian *kadag*). Others see it as possibly a Low German borrowing (cf. Low German *kaddig*, *kaddik*; see Karulis 1992 I: 366 and Sabaliauskas 1990: 226). Still other

linguists believe it to be a Baltic word. J. Endzelīns considers the forms kadegs and kadeģis registered in Kurzeme to be possible Lithuanian borrowings (ME II: 131) (for more on this, see ABL 2012: 447–448).

Another Finnic borrowing in the Baltic languages is the word puke 'flower' (< Liv. putkõz, Est. pukk²) (see Zeps 1962: 170, with reference to Thomsen; cf. Standard Estonian putk 'umbelliferous plant; tube, pipe'). This word in Latvian also serves as a component of the names of several plants, e.g. rudzupuķe 'cornflower (Centaurea cyanus)', saulespuke 'sunflower (Helianthus annuus)' etc. Both Baltic languages have a name for cornflower containing the common component 'flower' (Latv. puke, Lith. pukis). In Latvia it is a standard vocabulary word and is also used in a number of sub-dialects. In Lithuania, however, the corresponding word *rudzpukė*, with its variants *rùdzpukis*, rùdzpūkis, is known only in a small area around Klaipēda (see ABL 2012: 417); the semantics of the word kornblūmė 'cornflower' < German Kornblume, registered around Šilute, are similar.

The Latvian word for sunflower, containing the component *-puke* – saulespuke or saules puke -, is used in most sub-dialects and also in Standard Latvian. There is no corresponding word in Lithuanian.

Another possible Finno-Ugric component of plant names, *lipa*, occurs in the dialectal word kazlipe 'blackberry (Rubus caesius)', registered in the sub-dialect of Aknīste. The component *lipa* (variant lipe) 'short tail' seems to be borrowed from the Estonian lipp 'tail' ('Schweif') (ME II: 540-541; for more on this, see ABL 2012: 464). Another opinion is that it is related to the Proto-Indo-European \*lei-'to bow' (Karulis 1992 I: 553).

The following volumes of the Atlas of the Baltic Languages, which are still in progress, may also contain some words of Finnic origin. Judging by the responses to the project questionnaire, both Latvian and Lithuanian have several words of Finnic origin, e.g. the already mentioned Latvian puisis, Lithuanian puišys 'young man, boy' and Latvian launags, and the Lithuanian launagas 'afternoon meal', which are part of the standard vocabulary in Latvian, but dialectal words in Lithuanian.

Only Latvian has such words of Finnic origin as the dialectal word anis 'goose' (cf. Est. hani) (for more on this, see Rage 1986: 25–28).

Editor's note: pukk, given by Zeps, is actually Salaca Livonian (pukk), not Estonian.

#### 6. On some traces of the *leivi* and *krieviņi* languages

Finding the etymon of related borrowings in two languages that have been situated near each other for many centuries is not an easy task, but sometimes the depiction of their area of distribution on geolinguistic maps can be helpful. Thus, for instance, the word palata (polata), registered in some north-eastern Vidzeme sub-dialects, denotes a certain kind of settlement: one where several farmsteads are situated close by. Palata as a toponym has also been observed in the area of Smiltene and Skrīveri in Vidzeme. According to J. Endzelīns, it is a borrowing from the Russian polata 'castle' (ME III: 57), but Edīte Hauzenberga refers to the Estonian place names *Palata*, *Pala* and Palu, and associates them with the Estonian pala 'heat' (Hauzenberga 1933: 84, see also Zemzare 1940: 9). The Estonian linguist Mari Must believes that the word *palat(i)*, *polut(i)* is a borrowing from the Russian *polati*; it has several meanings in Estonian denoting a certain place: bed, sauna bench, floor etc. (Must 2000: 278-279). The word palat(i), as shown by map 16, created by M. Must, is used in a compact area in south-eastern Estonia. It is known that the *leivi*, or southern Estonians, immigrated from this area into north-eastern Vidzeme during the 17th century. Their descendants still spoke Estonian as late as the mid-20th century (Vaba 1997: 39). One can conclude that the word palata in the respective Vidzeme sub-dialects was established with the transferred meaning 'settlement' and still preserves the traces of the *leivi* language.

In Zemgale, however, the area around Bauska, Vecsaule and Skaistkalne was inhabited beginning in the 15th century by the *krievini*, whose ancestors spoke one of the Votic dialects, which later merged with the Latvian spoken by the descendants of Selonians and Semigallians, leaving some Finnic traces there. This area shows Finnic borrowings, which also occur in the Latvian-Estonian border zone, especially in the northern part of Latvia, e.g. jemperis 'teenager; short person'. Words containing this root have also been observed in southern Estonia and on the Estonian islands (Must 2000: 60–61; Kagaine 2004: 67-68). Other examples are: jagalēties 'to fool around', paikāt 'to mend', rīte 'heap of firewood', slekša 'trap' and vinga 'carbon monoxide, charcoal fumes', and the phonetic variants of these words. The name for a certain type of headgear, sapans, has been registered only in the krievini territory, in Vecsaule (Jansone 2004: 13–22), just like the already mentioned Finnic borrowing iet kacībās 'to visit a newborn baby'. This means that the latter two borrowings might be of Votic origin.

The territory of north-western Vidzeme sub-dialects along the Estonian border and in south-eastern Vidzeme (around Piebalga and Zaube) has such Finnic borrowings as *luste* 'brome-grass'.

#### 7. Conclusion

On the basis of geolinguistic research (LVDA, ABL, Zeps 1962, Must 2000 and Kagaine 2004), one can distinguish several smaller or larger areas reflecting contacts between Baltic and Finnic languages. They are the following:

- The territory of the Livonian dialect which originated from Latvian-Livonian contact; the dialect is spoken in some parts of the regions of Kurzeme and Vidzeme, which are still inhabited by a number of Livonians or their descendants. Many of these dialectal borrowings are related to the sea or fishing, and a few to other subjects, e.g., sonnis 'ram' (cf. Liv. sonn), stoģis, stuģis 'rye shock' (cf. Est. tugi 'support'), pižers 'leech' (cf. Liv. pizār), kangas 'loom' (cf. Liv. kāngaz 'cloth') and pīlags 'mountain ash' (cf. Liv. pī'lõg).
- The territory of north-western Vidzeme sub-dialects along the Estonian border, with such dialectal borrowings as konna, kunna 'frog' (cf. Est. konn), luca, lucis, lucka 'eel-pout' (cf. Est. luts), roidas 'rubbish, sweepings' and its variants (cf. Est. roid) (Kagaine 2004: 185-188), kābaks 'poor or stingy person' (cf. Est. kaabakas 'scoundrel') (Kagaine 2004: 70-72), kimpa 'bundle' (cf. Liv. kimp) (Kagaine 2004: 107–109), tosa 'steam' (cf. Est. toss) (Kagaine 2004: 211–212), sarvis 'grain sieve' (cf. Est. sari, gen. sarja), and pese 'tree fungus' (cf. Est. pess) (ME III: 202–203, LVDA).
- The territory around Gulbene in north-eastern Vidzeme, which historically had Estonian immigrants from south-eastern Estonia; there are such borrowings as mustikas, mustenes 'blueberries' (cf. Est. mustikas), iet tukās/tukuos 'to visit a newborn baby; to go to a baby shower' (cf. Est. tuhk), niras 'remains of melted fat' (cf. Est. nired) and palata 'a kind of settlement' (cf. Est. palati).
- The territory of the krieviņi in the Zemgale region around Bauska. Skaistkalne and Vecsaule, with the descendants of people who spoke Votic and whose language gradually merged with Latvian, leaving a certain Finno-Ugric impact: such Votic borrowings as iet kacībās 'to visit a newborn baby; to go to a baby shower' and *sapans* 'a type of headgear'.

• The territory around the town of Ludza (including Pilda, Nirza and Mērdzene), where some Estonian immigrants used to live (called the Estonians of Ludza, or the *luci/lutsi*). According to Uldis Balodis, its last fluent native speaker died in 2006 (Balodis 2014: 12). Only a few place names and legends of the area bear testimony to their existence.

Geolinguistic research, along with historical, archaeological and ethnographic information, often helps to clarify various issues in ethnic history, since dialects reflect local history, ethnic migration and contacts more extensively than the standard language does.

#### **Address:**

Anna Stafecka LU Latviešu valodas institūts Akadēmijas laukums 1 Rīga, LV-1050, Latvia E-mail: Anna.Stafecka@inbox.lv

#### **Abbreviations**

Est. – Estonian, Fin. – Finnish, gen. – genitive, Latv. – Latvian, Liv. – Livonian, Lith. – Lithuanian

#### References

Aben, Karl (1957) "Eesti ja liivi laene läti sõnavaras". *Emakeele Seltsi aastaraamat* (Tallinn) 3, 199–216.

ABL 2009 = Baltu valodu atlants. Prospekts. Baltų kalbų atlasas. Prospektas. Atlas of the Baltic Languages. A prospect. Editing and introduction by Anna Stafecka, Danguolė Mikulėnienė. Latvijas Universitāte, Latvijas Universitātes Latviešu valodas institūts, Lietuvių kalbos institutas. University of Latvia, Latvian Language Institute of the University of Latvia, and Institute of the Lithuanian Language. Riga, Vilnius 2009.

ABL 2012 = Baltu valodu atlants. Leksika 1. Flora. Baltų kalbų atlasas. Leksika 1. Flora. Atlas of the Baltic Languages. Lexis 1. Flora. Editing by Danguolė Mikulėnienė and Anna Stafecka. Vilnius: Lietuvių kalbos institutas, 2012. [CD.]

ABL 2013 = Baltu valodu atlants. Leksika 1. Flora. Baltų kalbų atlasas. Leksika 1. Flora. Atlas of the Baltic Languages. Lexis 1. Flora. Editing by Danguolė Mikulėnienė and Anna Stafecka. 2nd revised edition. Vilnius: Latvijas Universitātes

- Latviešu valodas institūts, Lietuvių kalbos institutas. Latvian Language Institute of the University of Latvia and Institute of the Lithuanian Language.
- ALE = *Atlas Linguarum Europae*. Vol. I, 1–7. *Cartes et Commentaires*. Assen, Maastricht: Van Gorcum, Roma: Poligrafico, 1983–2007.
- ALE 1973 = Atlas Linguarum Europae. Premier Questionnaire. I. Texte. Sous la rédaction de A. Weijnen. Nimègue: Secrétariat de la Rédaction de l'A.L.E.
- ALFE = Atlas Linguarum Fennicarum. Itämerensuomalainen kielikartasto. Läänemeresoome keeleatlas. Ostseefinnischer Sprachatlas. Lingvističeskij atlas pribaltijsko-finskix jazykov. Editor-in-chief Tuomo Tuomi. (Suomalaisen Kirjallisuuden Seuran Toimituksia, 800 and 1295. Kotimaisten kielten tutkimuskeskuksen julkaisuja, 118 and 159.) Helsinki: Suomalaisen Kirjallisuuden Seura, Kotimaisten kielten tutkimuskeskus, 2004–2010.
- Balodis, Uldis (2014) "Writing down Lutsi: Creating an orthography for a South Estonian variety of Latgale". In *Abstracts of the 50th Arturs Ozols international conference "General linguistics: language system and language use, March 20–21, 2014*", 12. Riga: University of Latvia, Faculty of Humanities.
- Bielenstein, Adalbert (1892) Atlas der etnologischen Geographie, des heutigen und des phraehistorischen Lettenlands: Beilage zu den Grenzen des lettischen Volksstammes und der lettischen Sprache in der Gegenwart und im 13. Jahrhundert. St. Petersburg.
- Blumberga, Mäkeläinen, Pajusalu (2011) = *Liivlased. Ajalugu, keel ja kultuur*. Compiled and edited by Renāte Blumberga, Tapio Mäkeläinen, and Karl Pajusalu. Tallinn: Eesti Keele Sihtasutus.
- Blumberga, Mekeleinens, Pajusalu (2013) = *Lībieši. Vēsture, valoda un kultūra*. Compiled and edited by Renāte Blumberga, Tapio Mekeleinens, and Karls Pajusalu. Rīga: Līvõ Kultūr sidām.
- Boiko, Kersti (1990) "Fizioģeogrāfiskie apelatīvi Ziemeļkurzemes lībiešu zvejniekciemu vietvārdos". In *Onomastica Lettica*. Compiled by Dzintra Hirša. Editorial board Benita Laumane (managing editor), Dzintra Hirša, Ojārs Bušs, 52–85. Rīga: Zinātne.
- Brejdak, Anton (1970) "Vlijanie pribaltijsko-finskix jazykov na latgal'skie govory Ludzenskogo rajona Latvijskoj SSR". In *Vzaimosvjazi baltov i pribaltijskix finnov*, 157–164. Riga: Zinatne.
- Būga, Kazimieras (1959 [1922]) "Kalba ir senovė". In *Rinktiniai raštai II*, 7–328. Vilnius: Valstybinė politinės ir literatūros leidykla.
- Bušmane, Brigita (2000) "Baltijas jūras somu cilmes aizguvumu izplatība latviešu valodas izloksnēs (pēc LVDA materiāliem)". *Baltistica* XXXV, 2, 201–211.
- Bušs, Ojārs (2009a) "Finno-Ugric borrowings in Latvian (problems of research)". In The Baltic languages and the Nordic countries. Conference held at the University of Oslo Faculty of Humanities Department of Linguistics and Scandinavian Studies, June 19–20, 2009. Abstracts, 10–12. Oslo.
- Bušs, Ojārs (2009b) "Finno-Ugric borrowings in Latvian (problems of research)". In The Baltic languages and the Nordic countries. Papers presented at the conference held at the University of Oslo Faculty of Humanities Department of

- *Linguistics and Nordic Studies, June 19–20, 2009.* Chief editor Sturla Berg-Olsen, 31–36. Vilnius: Lietuvių kalbos institutas.
- Bušs, Ojārs (2009c) "Latviešu valodas leksiskie somugrismi: izpētes vēsture un perspektīvas". *Latvijas Universitātes raksti* 746. *Valodniecība. Latvistika un somugristika*, 27–34.
- EH = Jānis Endzelīns, Edīte Hauzenberga (1934–1938) *Papildinājumi un labojumi K. Mūlenbacha "Latviešu valodas vārdnīcai" I–II.* Rīga: Kultūras fonda izdevums.
- Hauzenberga, Edīte (1933) "Par piedēkli *-āt*". *Filoloģijas materiāli*, 84. Rīga: Ramave.
- Jansone, Ilga (2004) "Par dažiem somugrismiem Bauskas apkārtnes izloksnēs". *LZA Vēstis* 58, 5, 13–22.
- Kagaine, Elga (2004) Lokālie somugrismi latviešu valodas Ziemeļrietumvidzemes izloksnēs. Rīga: LU Latviešu valodas institūts.
- Karulis, Konstantīns (1992) Latviešu etimoloģijas vārdnīca. Rīga: Avots.
- Kettunen, Lauri (1938) *Livisches Wörterbuch mit grammatischer Einleitung*. Helsinki: Suomalais-Ugrilainen Seura.
- Klein 1653 = Pirmoji lietuvių kalbos gramatika. 1653 metai = M. Danielis Kleinii Grammatica Lituanica et Compendium Lituanico-germanicum. Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla, 1957.
- Kurschat, Friedrich (1876) Grammatik der littauischen sprache. Mit einer karte des littauischen sprachgebiets und einer abhandlung über littauische volkspoesie, nebst musikbeilage von 25 dainosmelodien. Halle: Verlag der Buchhandlung des Waisenhauses.
- Lange (1773) = Lettisch-Deutscher Theil des volständigen Lettischen Lexici, darinnen nicht nur sämtliche Stammwörter dieser Sprache samt ihren Abstämlingen, sondern auch die seltene, nur in gewißen Gegenden gebräuchliche Wörter, zum Nachschlagen, angezeigt werden. Schloß Ober/Pahlen.
- Lībieši. Rakstu krājums. Sastādītāja Kersti Boiko. Rīga: Zinātne, 1994.
- LKA = E. Grinaveckienė, A. Jonaitytė, J. Lipskienė, K. Morkūnas, M. Razmukaitė, B. Vanagienė, A. Vidugiris (1977) *Lietuvių kalbos atlasas 1. Leksika*. Chief editor K. Morkūnas. Vilnius: Mokslas.
- LVDA = B. Bušmane, B. Laumane, A. Stafecka (1999) *Latviešu valodas dialektu atlants. Leksika*. [Dialectal Atlas of Latvian. Vocabulary]. Darba zinātniskā vadītāja B. Laumane. Rīga: Zinātne.
- Mancelius, Georgius (1638) = LETTUS, Das ift Wortbuch / Sampt angehegtem täglichem Gebrauch der Lettischen Sprache; / Allen vnd jeden Außheimischen / die in Churland / Semgallen vnd Lettischem Liefslande bleiben / vnd sich redlich nehren wollen / zu Nutze versertigt / Durch / GEORGIVM MANCELIVM Semgall. der H. Schrifft Licentiatum &c. Erster Theil. Gedruckt vnnd verlegt zu Riga / durch Gerhard Schröder / Anno M. DC XXXVIII].
- ME = K[ārļa] *Mūlenbacha Latviešu valodas vārdnīca* 1–4. Rediģējis, papildinājis, turpinājis J. Endzelīns. Rīga: Izglītības ministrija, 1923–1932.
- Must, Mari (2000) Vene laensõnad eesti murretes. Tallinn: Eesti Keele Sihtasutus.

- Raģe, Silvija (1986) "Baltijas somu valodu aizguvumi latviešu valodā, ko pirmais etimoloģizējis J. Endzelīns". In *Dialektālās leksikas jautājumi* 1, 18–126. Rīga: Zinātne.
- Rudzīte, Marta (1994) "Latviešu un lībiešu valodas savstarpējā ietekme". In *Lībieši. Rakstu krājums*. Compiled by Kersti Boiko, 288–319. Rīga: Zinātne.
- Sabaliauskas, Algirdas (1990) Lietuvių kalbos leksika. Vilnius: Mokslas.
- SLW = *Salis-Livisches Wörterbuch*. Herausgegeben von Eberhard Winkler und Karl Pajusalu. (Linguistica Uralica supplementary series, 3.) Tallinn: Teaduste Akadeemia Kirjastus, 2009.
- Thomsen, Vilhelm (1890) Berøringen mellem de finske og de baltiske (litauisk-lettiske) Sprog, en sproghistorisk Undersøgelse. København: Blanco Lunos Bogtryk.
- Vaba, Lembit (1997) Uurimusi läti-eesti keelesuhetest. Tallinn, Tampere.
- Viitso, Tiit-Rein and Valts Ernštreits (2012) Līvõkīel-ēstikīel-leṭkīel sõnārōntõz. Liivieesti-läti sõnaraamat. Lībiešu-igauņu-latviešu vārdnīca. Tartu, Rīga: Tartu Ülikool, Latviešu valodas aģentūra.
- VKS (1994) = Vadja keele sõnaraamat II. Edited by Elna Adler and Merle Leppik. Tallinn, 1994.
- Wiedemann, Ferdinand Johann (1893) *Estnisch-deutsches Wörterbuch*. Zweite vermehrte Auflage. Redigirt von Dr. Jacob Hurt. St. Petersburg. [4. edition Tallinn, 1973.]
- Winkler, Eberhard (1997) Krewinisch. Zur Erschließung einer ausgestorbenen ostseefinnischen Sprachform. Wiesbaden: Harrassowitz.
- Zemzare, Daina (1940) *Valodas liecības par Lejasciema novadu*. Rīga: VAPP praktisko zinātņu apgādniecība.
- Zeps, Valdis Juris (1962) *Latvian and Finnic linguistic convergences*. Bloomington: Indiana University, The Hague: Mouton and Co.

Kokkuvõte. Anna Stafecka: Balti ja läänemeresoome keelesuhete kajastus balti keelte geolingvistilistes uurimustes. Artikkel esitab ülevaate balti ja läänemeresoome keelesuhete kajastamisest balti keelte geolingvistilistes uurimustes. Neil kontaktidel on küllaltki pikk ajalugu ja need on eriti tugevad läti ja läänemeresoome keelte (eriti liivi ja eesti keele) vahel. Leedu keelde on läänemeresoome laenud saadud peamiselt läti keele vahendusel ja need kuuluvad leedu murdesõnavarasse. Analüüsitud materjal võimaldab eristada Läti murrakutes mitut läänemeresoome mõjupiirkonda: 1) läti-liivi kontaktide mõjul kujunenud liivipärase murde ala; 2) Eesti piiri äärsed murrakud; 3) Gulbene ja Alūksne ümbruse murrakud; 4) kreevinite (vadja keele kõnelejate järglaste) ala Zemgales ja 5) Ludza ümbruse murrakud Latgales. Keelekontaktide geolingvistiline uurimine võib kaasa aidata etnilise ajaloo küsimuste lahendamisele.

Märksõnad: dialektoloogia, geolingvistika, balti-läänemeresoome keelekontaktid, murdeatlased