LIVONIAN POLAR QUESTIONS IN THEIR AREAL CONTEXT

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Abstract. This paper analyses strategies for forming polar questions and their historical sources in the two main varieties of Livonian – Courland Livonian and Salaca Livonian. The results reveal that the main means for marking polar questions in both varieties are sentence-initial particles. Their usage is compared to the means found in other varieties spoken in the Central Baltic area. This micro-areal comparison offers an in-depth analysis of the main patterns in the area, including their developmental paths. It appears that on several occasions, Livonian, Latvian, Latgalian, and Leivu South Estonian (spoken in Latvia) pattern together as opposed to the Estonian and South Estonian varieties (spoken in Estonia) and Lutsi and Kraasna South Estonian (spoken, respectively, in southeastern Latvia and the southern Pskov region in Russia). The data originate from various sources and different times, and were obtained by using both manual and automated methods; the analyses are qualitative.

Keywords: interrogative particles, conjunction, disjunction, language contacts, Southern Finnic, Baltic languages

1. Introduction

Polar questions and content questions form the two main question types.[1] Typically, polar questions expect a 'yes' or 'no' answer and are thus sometimes also called *yes-no questions*. Crosslinguistically, they

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1 Strictly speaking, a distinction should be made between interrogative sentences and questions that can be regarded as their semantic and pragmatic counterpart. As here the focus is on polar interrogatives that express polar questions, we typically refer to them as questions.

reveal a variety of formation strategies: use of a question particle, change of word order, a distinct intonation pattern, a tag, special verb morphology (interrogative mood), disjunctive-negative structures, or a combination of several of these means (e.g., König & Siemund 2007: 292, Dryer 2013, Aikhenvald 2014: 236–237). Alternative questions are a third question type, which show similarities with polar questions in terms of how they are formed, but resemble content questions more with respect to how they are answered (see, e.g., König & Siemund 2007: 12–20, Miestamo 2011, Biezma & Rawins 2011).

In the Circum-Baltic (CB) languages,[2] the most common strategy is to use polar question particles. In Europe, this strategy is characteristic of the languages on the periphery: in addition to the Baltic region, it is also found in the languages of the Balkan region and in the Celtic languages (Koptjevskaja-Tamm & Wälchli 2001: 712–714). The polar question markers in the CB languages typically occupy a sentence-initial position (*ibid.*). However, they also include languages like Estonian, which contain both sentence-initial and sentence-final particles (see Hennoste et al. 2016, Metslang, Habicht & Pajusalu 2017). Globally, sentence-initial position tends to be less common than sentence-final position (see Dryer 2013, König & Siemund 2007: 14). The second most common way to form polar questions in the CB languages is verb fronting, although it is found only in a few languages (Koptjevskaja-Tamm & Wälchli 2001: 712–714, Stolz 1991: 67–68). As verb fronting is characteristic of many European languages it has thus been considered as a possible feature of Standard Average European (see Haspelmath 2001).

Based on current knowledge, markers of disjunctive coordination (i.e., 'or'-coordination) are the most typical source of polar question particles in the world's languages, including in the Baltic region; for example, the earlier Lithuanian polar question particle *angu* and Latvian *-g* can be traced back to disjunctive coordinators (Lühr 1995, Nau &

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2   As explained by Östen Dahl and Maria Koptjevskaja-Tamm (2001: XIV–XVII), the exact set of languages that constitute the Circum-Baltic languages is intentionally left vague. Therefore, the languages included in this group in various analyses vary between volumes. The section on polar questions mainly includes conclusions based on the following languages: (i) Estonian, Livonian, Veps (Finnic), (ii) North Saami (Saamic), (iii) Russian, Belarusian, Ukrainian, Polish (Slavic), (iv) Swedish, German, Yiddish (Germanic), and (v) Latvian, Latgalian, Lithuanian (Baltic) (see Koptjevskaja-Tamm & Wälchli 2001: 712–714).

Ostrowski 2010). Other important sources are markers of conjunctive meaning ('and'-coordination), e.g., Lithuanian and Latvian *ar* 'with' < 'and' (Lühr 1995: 124, cf. Karulis 2001: 75), and also markers of negation and epistemic modality (Metslang, Habicht & Pajusalu 2017, Kuteva et al. 2019: 486). Both types of coordination-based question markers in the Baltic languages reveal PAT(tern)- and MAT(ter)-transfer as well as language-internal developments. Whereas MAT stands for replication of morphological form and phonological shape, PAT means the transfer of a pattern without a form; MAT and PAT can also be combined (Sakel 2007: 15). Although the development of the disjunctive or conjunctive coordinator into a polar question marker is an expected path of grammaticalisation (Kuteva et al. 2019: 59–60, 306–307), it may find support from a contact language if it contains a similar marker with both functions. The Latvian *vai*, for instance, is regarded to be of Finnic origin (e.g., Thomsen 1890: 287–288 refers to Livonian, Estonian, and Finnish counterparts); it replaced the earlier question particle *ar(īg)* (Endzelin 1923: 541). Thus, *vai* in Latvian is an instance of MAT-transfer. Its usage as a question particle, in turn, could reveal a PAT-borrowing but in the opposite direction (see Section 5).

This paper studies strategies for forming polar questions in Livonian focusing on interrogative particles. They are, in turn, compared to interrogative markers in the languages of the Central Baltic area to shed further light on their distribution. On the one hand, this continues previous research on interrogative markers and their development (see, e.g., Metslang 1981, Metslang, Habicht & Pajusalu 2011, 2017), on the other hand, this examines areal developments of structural features of Livonian and other Southern Finnic languages (see, e.g., Norvik 2021). The two main varieties of Livonian – Courland Livonian and Salaca Livonian – are both included in this study. Previously, formation of polar questions in Livonian has found only some attention, but there are no in-depth studies. For instance, in his grammatical sketch of Courland Livonian, Viitso (2008: 345) lists two polar question particles (*või* and *kas*) without further explanation as to their usage; no other possible strategies for forming polar questions are mentioned. In their study on the paths of development of polar question markers, Metslang, Habicht & Pajusalu (2017) also list Livonian *agā* as a polar question marker; which is claimed to show development from an adversative conjunction ('but'-coordination) to an interrogative meaning via a disjunctive

meaning. The particle *või* is traced back to a marker of disjunctive coordination and *kas* to a marker of conjunctive coordination (*ibid.*). Grammatical descriptions of Salaca Livonian present examples of polar question formation using the particle *voj ~ woj ~ vej ~ wej*; verb fronting is also mentioned (see Sjögren & Wiedemann 1861: 265, Winkler & Pajusalu 2018: 164).

The objectives of the present study are the following:

1. To outline the main types of polar question formation and their distribution in Livonian by considering both synchronic variation and diachronic development.
2. To compare the results for Courland Livonian with those for Salaca Livonian but also to view the results in terms of the broader areal background.

In order to achieve the second goal in this study, we included close cognate varieties and non-cognate varieties of Livonian spoken in its areal proximity: a) the South Estonian (SE) varieties Mulgi, Võro, Seto; b) the SE language island varieties Leivu, Lutsi, and Kraasna; c) Kihnu; d) Standard Estonian; e) Standard Latvian; f) (Standard) Latgalian. The SE language island varieties provide an interesting point of comparison as they enable us to study the outcomes of a contact situation between Finnic and Baltic (in the case of Leivu and Lutsi), but also between Finnic and Russian (Kraasna) (for more information on the background of the SE language islands and their multifaceted language contact situations, see Norvik et al. 2021: 33–40). Estonian and Latvian both represent standard languages, whereas Kihnu is a North Estonian (NE) variety included for its areal proximity to Livonian, and Latgalian is the main contact variety of Lutsi. The inclusion of detailed information on the Finnic varieties was driven by the aim to set the focus on the southernmost Finnic languages.

We expect the sentence-initial particle *või* to be the most common way to form polar questions in Livonian, whereas the use of other means is restricted to certain registers or dialectal areas. We hypothesise that the initial position of the corresponding particle reflects a Latvian pattern, for which we find evidence by examining other Finnic varieties in the area. Additionally, we hypothesise that although we are able to find examples of a finite verb occurring in the initial position in Livonian, this strategy does not show spread over time. In general, we expect

the Livonian varieties to primarily pattern with the varieties spoken in their immediate proximity (incl. non-cognate varieties) and additionally reveal similarities with other varieties in the studied area.

This article proceeds as follows. First, we introduce data collection methods. Second, we present the main coordination markers in the studied varieties and their paths to becoming polar question markers. Third, we analyse the main means for forming polar questions in Livonian in their broader areal context. This is followed by a discussion and conclusions.

2.   Materials and methods

The data originate from various sources and time periods. As the focus is on Livonian, we aimed at maximally good coverage of Livonian. The Courland Livonian data were mainly collected from (i) text collections by Kettunen (1925), Setälä (1953), and Mägiste (1964) that include spoken language data spanning the period from the end of the 19th century until the second half of the 20th century, (ii) the primers by Damberg (1935) and Stalte (2011) that represent the language use of the 1930s and serve as examples of edited texts. The language of the second half of the 20th century is represented by example sentences collected from the Livonian-Estonian-Latvian dictionary (Viitso & Ernštreits 2012) and transcriptions of recordings stored in the Archives of Estonian Dialects and Kindred Languages (AEDKL). The dictionary includes both examples collected from speakers with a good command of Livonian as well as literary examples (see Viitso & Ernštreits 2012: 12). The Salaca Livonian data originate from the studies authored by Winkler and Pajusalu (2016, 2018), originally collected by Sjögren in 1846 and published in 1861 (see Sjögren & Wiedemann 1861).

In the case of the SE language island varieties, we also aimed at maximally good coverage as the data all in all are scarce. The text collection by Mets et al. (2014) served as the main source. The SE Mulgi, Võro, Seto varieties, and the NE Kihnu variety were included for comparative purposes, thus, we mainly aimed at noting different types of examples from various sources (i.e., EMS, Tanning 1961, Lonn & Niit 2002, Salve 2008, Käsi 2011, Laande & Todesk 2013, Faster et al. 2014, Laos 2015, Leas et al. 2016, Saar et al. 2020, Ilves et al. 2021, Saar et al.

(in preparation)). In the case of Standard Estonian, Standard Latvian, and Latgalian, we primarily relied on previous studies (e.g., Hennoste et al. 2016, Metslang 2017, Metslang, Habicht & Pajusalu 2017) and grammar books (e.g., Cibuļs & Leikuma 2003, Nau 2011, Kalnača & Lokmane 2021).

The methods used to collect the data depended on the source. To a great extent at least semi-automated searching was available (e.g., for various online dictionaries and PDFs created with OCR). However, some sources were also checked manually (e.g., Kallas 1903). Whenever it was necessary to check the interrogative function we considered the broader context: whether the preceding context suggests that the speaker is less knowledgeable than the listener, or whether there is an answer suggesting that a sentence was interpreted as a question. We only considered interrogative sentences used to express a question proper, i.e., a request for information or confirmation (in such cases, the speaker is more knowledgeable than the listener). We did not analyse interrogative sentences with other functions: directives, rhetorical questions, other-initiations of repair, etc. (see, e.g., Hennoste, Rääbis & Laanesoo 2017). Due to the limited number of interrogative clauses in the corpora, our analyses will be qualitative.

In order to study the developmental paths of polar questions, we considered markers of disjunctive, conjunctive, and adversative coordination. Although polar question markers may have other possible sources, e.g., subordinating conjunctions, markers of epistemic modality, pronouns, or adverbs (see Metslang, Habicht & Pajusalu 2017 for information on the CB languages; Koptjevskaja-Tamm & Wälchli 2001: 712–713 for pronominal sources in western Russian dialects), this study limits itself to the main means of expression of polar questions in Livonian.

It is important to note that this study is largely based on written examples and text collections, thus, in the course of this study we have not used acoustic analysis for investigating intonation. As previously shown, polar questions in Estonian and Finnish, for instance, are formed by morphosyntactic means rather than using intonation (Asu et al. 2016: 175). However, there seems to be a compensatory relationship between morphosyntactic and prosodic formation of interrogatives: the more the utterance function is indicated by morphosyntactic means, the less intonation is used (see more in Asu et al. 2016: 179–181). Still, we

acknowledge that in further studies it is important to get more information about the role of intonation in Livonian. Koptjevskaja-Tamm & Wälchli (2001: 712) also point out that a rising intonation pattern may accompany the usage of polar question particles in the CB languages.

3. Coordination markers and their paths to becoming polar question particles

Coordination markers are a common source for polar question markers (see Section 1). Therefore, Section 3.1 presents an overview of coordination markers in Livonian in their areal context, while Section 3.2 provides a general account of their development into polar question markers.

3.1. Markers of coordination

Polar question markers commonly originate from markers of disjunctive coordination ('or'-coordination), conjunctive coordination ('and'-coordination), and adversative coordination ('but'-coordination) (see Bencini 2003, Metslang, Habicht & Pajusalu 2017). The main coordinators associated with these types in the studied varieties are listed in Table 1. Parentheses are used to indicate that a corresponding marker is only sporadic in a language. For instance, Kihnu *ja* reflects late influence from Standard Estonian, Kraasna *da* late Russian influence, Leivu *aber* late German influence; the use of these markers is usually limited to cases of code-copying. Latgalian *aba* is only found in older language use (Cibuļs & Leikuma 2003: 115). The coordinators in Table 1 are all instances of monosyndetic coordination (i.e., usage of a single coordination marker), which is the most common type (for bisyndetic and asyndetic coordination as well as some special strategies, see Haspelmath 2007). Here and in other tables, the studied varieties are presented in the order that best follows their areal distribution and connections to one another. Markers of different origin are listed in separate rows whenever they occurred in more than two varieties.

Table 1. Markers of coordination.

	Est	Mul	Khn	Vro	Set	Kra	Lut	Lei	SLiv	CLiv	Lav	Ltg	Rus
disjunctive 'or'	või	võ, või	või	vai	va, vai	vai	vai	vai, või	voj	või	vai	voi	
							ali			agā		ci, (aba)	ili
conjunctive 'and'	ja	ja	(ja)	ja	ja	ja	ja	ja	ja	ja			
	ning	ning, nink	ning	ni	ne, ni	ñi, ni	ne, ni	ni					
								un	un	un	un	un	
						i	i	ii				i	i
						(da)	da					da, da i	da
adversative 'but'	aga	a, aga	a, aga	a(q), aga(q)	a(q), aga(q)	a	a, ali	(aber, abõr)		agā		a	a
								bet, bät	bet	bet	bet	bet	
							da				tačũ	da	da
	kuid											no	no

The markers shown in Table 1 include those of Finnic origin or that have emerged in the Finnic languages: the *või~vai* type, *ning~ni* type, *aga* type, but also Estonian *kuid* (see Metsmägi, Sedrik & Soosaar 2012: 187). Whereas *ning~ni* has spread only in the Estonian varieties, the *või~vai* and *aga* types are present also in Livonian (e.g., 1–2). Furthermore, the Finnic *või~vai* has reached Latvian and Latgalian (probably via South Estonian or Livonian). Livonian *agā* may be a loan from Estonian, where it is traced back to a 3Sg possessive illative form of the word **aika* 'time' (see Mägiste 2000: 18–19, Metsmägi, Sedrik & Soosaar 2012: 43, Habicht et al. 2018). Unlike in Estonian, the Courland Livonian *agā* also appears as a disjunctive coordinator (see Table 1) reflecting a semantic shift: adversative > disjunctive. Such a development probably results from the fact that in both coordination types, the coordinands are used to convey difference: whereas adversative coordination highlights the difference between constituents, disjunctive coordination presents the coordinands as alternatives expressing different entities. (For polysemy between the markers used for different coordination types, see, e.g., Waßner 2014: 628–630, Mattissen 2021.) Finnic *aga* and Russian *a* (and also *a* in Latgalian) are of different origin but not always easy to tell apart. Namely, *a* in the Finnic varieties may either be a shortening (following the Russian model) or a Slavic loan (for a similar comment about Estonian dialects, see Must 2000: 19). Thus, they are included in the same row in Table 1.

(1)   CLiv: *tabā **või** šlūik* (Viitso & Ernštreits 2012)
           padlock or lock
           'a padlock **or** a lock'

(2)   CLiv: *mā'dõltõbki'v **agā** rišt* (Viitso & Ernštreits 2012)
           memorial_stone or cross
           'a memorial stone **or** a cross'

Several of the markers included in Table 1 reflect multifaceted contacts in the area. For instance, *ja* in the Finnic varieties is a Germanic loanword (Metsmägi, Sedrik & Soosaar 2012: 95), Latvian/Latgalian *un* goes back to German *und* 'and' (Karulis 2001: 1087), *bet* is an old Indo-European root (Karulis 2001: 123), and *ci* in Latgalian is a Slavic loan originally expressing 'why' (Metslang, Habicht & Pajusalu 2017: 497,

Nau 2011: 92). As Table 1 illustrates, whereas *ja* connects Livonian with the Estonian varieties, the presence of *un* and *bet* makes Livonian similar to Latvian, Latgalian, but also to Leivu (e.g., cf. 3a–c). Such a distribution, where Leivu patterns with Latvian rather than Lutsi or Kraasna, is in line with suggestions that Latvian has had a greater impact on Leivu than on the other SE language islands (e.g., Vaba 1977, 2011).

(3)   CLiv: a. ***bet** sa i'zt kūl* (Viitso & Ernštreits 2012)
              but 2SG NEG.PST.2SG hear.CNG
              '**but** you did not hear'

      Lav: b. ***bet** mēs neskatāmies* (LVK)
              but 1PL NEG:look:REFL.1PL
              '**but** we do not look'

      Lei: c. ***bet** mul sa'ie ä'ä na'ane* (Mets et al. 2014: 34)
              but 1SG:ADE get:PST.3SG good wife
              '**but** I got a good wife'

Russian (or some Slavic variety) is the source for the spread of *i*, *no*, and *da ~ da i* found in Latgalian, Lutsi, and Kraasna (e.g., see 4a–c). (The marker *da* can have both a conjunctive and adversative function in all three languages; for the commonalities between these two types of coordination, see Metslang, Pajusalu & Habicht 2015). Whereas markers of coordination in Livonian and Leivu show Latvian influence, there seems to be no direct Russian/Slavic influence on Livonian (cf. Leivu *ii*).

(4)   Rus: a. *poshel by v kino, **da** net vremeni* (VES)
              go:PST.M COND PREP cinema.ACC CONJ NEG time:GEN
              '(I) would go to the cinema, **but** there's no time'

      Lut: b. *hot´=ś vana, **da** virk* (Mets et al. 2014: 203)
              although=CL old CONJ diligent
              'although old, **still** diligent'

      Ltg: c. *tik ād **da** dzer* (Cibuļs & Leikuma 2003: 115)
              only eat CONJ drink
              'only eat and drink'

3.2. Development into question particles

Coordinating conjunctions may become fixed in sentence-initial or sentence-final position (left or right periphery), where they function as particles expressing contextual relations, subjective and intersubjective functions, including interrogation – the latter gives rise to their development into question particles (see Metslang, Pajusalu & Habicht 2014, Metslang, Habicht & Pajusalu 2017). In addition to conjunctions, particles also may express connective relations, e.g., Estonian *ka* 'also' has developed into a question particle *kas.* Originally, it derives from **kansa-k*, which is a lative form of the noun *kansa* 'people, company, companions'. It lexicalised into three uninflected words expressing accompaniment: a verb particle (*kaasa* 'together'), an adposition (**kaas* (comitative adposition) → *-kaa* → *-ga* (comitative ending)), and a connective particle (*kaas* → *ka* 'also'); the latter gave rise to the question marker *kas* (Metslang, Habicht & Pajusalu 2011: 166–167; see also Metsmägi, Sedrik & Soosaar 2012: 110).

Table 2 contains the main polar question markers in Livonian – VÕI, KAS, AGĀ – and their counterparts in the studied cognate and noncognate contact varieties (capital letters are hereafter used to denote forms with the same origin). It appears that the polar question markers in Livonian – and also in the majority of other varieties in the area – arose from coordination markers (cf. Table 1 in Section 3.1). It should be noted that although it is possible that the interrogative function of Livonian *agā* developed via a disjunctive function (Metslang, Habicht & Pajusalu 2017: 497; see also Section 3.1), the path adversative > interrogative also deserves to be considered. The connection with the interrogative function also emerges from its use as a modal particle (see Tomingas 2022: 104–105). Although Latgalian *ci* does not have cognates in the Finnic languages, it is presented in Table 2 for comparative purposes. Russian *a*, which can appear as a polar question marker (e.g., see Tolkovye, sub *a*), and Latgalian *a* are – much as in Table 1 – included in the same row with Finnic markers although they are not necessarily of the same origin (see Section 3.1).

Table 2. Markers of polar questions and alternative questions.

	Est	Mul	Khn	Vro	Set	Lut	Kra	Lei	SLiv	CLiv	Lav	Ltg	Rus
Polar, only I		või, võ		vai	vai			vai, võis, veis, vais	voj, vej	või, võ, u	vai	voi	
	kas	ka, kas	kas	kas	kas	kas	kas	kas		kas, ka			
						a				agā		a	a
												ci	
Polar, only F	või, vä	või, võh	ve, vä, või	vai	vai, vaih, vah	va							
Polar, I + F	kas + või, vä	ka + võh	kas + ve, või	kas + vai	kas + vai, vaih	kas + vai		veis + vai					
Altern, (I +) coordinator	Ø/ kas + või	Ø/ ka + vai, võ, või	Ø/ kas + või	Ø/ kas + vai	Ø/ kas, ka/ vai + vai, va	Ø/ kas/ vai + vai			vej + vaj/ vej	või, u + või, agā	Ø/ vai + vai	Ø/ voi + voi; ci + ci	

A particle is included in Table 2 only if it appears as a regular polar question marker or at least shows a tendency to be used as such. As polar question markers could occur in different positions in the studied varieties, we made a distinction between: (i) polar question markers occurring only in initial position (Polar, only I), (ii) polar question markers occupying both initial and final position (Polar, I + F), and (iii) polar question markers appearing only in final position (Polar, only F). No such fine-grained distinction is made for alternative questions as they are treated as a source of further evidence, especially in

the case of varieties where data are scarce (e.g., Kraasna). Alternative questions include an internal coordinator but may also include a polar question marker (lack of it is indicated by Ø).

Comparison of Tables 1 and 2 reveals that a polar question marker does not necessarily overlap with the corresponding coordination marker, e.g., disjunctive coordination in Courland Livonian is marked by *või* but when used as a question particle *võ*, *u* are also possible. Reduction of the phonetic shape is expected as a result of grammaticalisation.

The data collected from the Estonian varieties also showed particles containing a negation component, e.g., the Standard Estonian *ega* goes back to the negative marker *ei* + coordination particle *ka* (5). Such examples were, however, excluded from the analysis, as in Livonian there is no such particle and the corresponding function is expressed by means of VÕI + a verb in the negative form (e.g., 6–7). Latvian also does not use a polar question particle containing a negation component, e.g., see the Latvian translation[3] provided for the Salaca Livonian example (7).

(5)   Est: ***Ega** minu autosse muud lasti **ei tule**?* (etTenTen)
            Q.NEG 1SG.GEN car:ILL other:PRT load.PRT NEG come.CNG
            'Might there be any more cargo in my car?'

(6)   CLiv: ***või** `si'nnõn **ä'b ūo vajāg** `vietā?* (AEDKL[SUHK0506-01])
            Q 2SG:DAT NEG.PRS.3SG be.CNG need water.PRT
            'Don't you need water?'

(7)   SLiv: a. ***Woj** sa **ab tied** kus täma olj.* (Winkler & Pajusalu 2016: 247)
               Q 2SG NEG.PRS.2SG know.CNG where 3SG be:PST.3SG
               'Don't you know where s/he was?'

           b. '***woi** tu **nesinni**, kur wiņʃch bijis'.* (Winkler & Pajusalu 2016: 247)
               Q 2SG NEG:know.2SG where 3SG.M be.PST.PTCP.M
               'Don't you know where he was?'

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3   In some cases, Sjögren had Latvian examples translated in order to obtain his Salaca Livonian data (see more in Winkler & Pajusalu 2016: 19–21).

4.   Polar questions in Livonian in their areal context

The most typical way to form polar questions in Livonian is to use a particle in sentence-initial position. Whereas both Courland Livonian and Salaca Livonian mainly use VÕI (see Section 4.1), Courland Livonian occasionally also uses KAS and AGĀ (see Sections 4.2 and 4.3, respectively). Relying on the collected data, a less common way is to use some other means (see Section 4.4). In the following sections, the results are discussed in their broader context. As alternative questions can provide additional information regarding the paths of development of polar question markers (cf. König & Siemund 2007: 12), they are also included in the analyses.

4.1.   VÕI

The majority of examples of polar questions in Courland Livonian and Salaca Livonian were formed by means of the particle VÕI in initial position, as in (8) and (9). The alternative questions also mainly showed the pattern VÕI + VÕI, as in (10); however, VÕI + AGĀ also appeared (see Section 4.3).

(8)   CLiv: ***Või** sa tuoid ka leibõ?* (Setälä 1953)
            Q 2sg bring:pst:2sg also bread.prt
            'Did you also bring some bread?'

(9)   SLiv: ***Voi** täädl om puogad?* (Winkler & Pajusalu 2018: 164)
            Q 2pl:ade;all be.3sg son:pl
            'Do you have sons?'

(10) CLiv: ***Või** sa tǭ'd lǟ'dõ kuodāj **või** īedõ tǟnõ?*
            Q 2sg want:2sg go:inf home.ill or stay:inf here.ill
            'Do you want to go home or stay here?'

VÕI has spread across the entire Livonian speech area; it is also possible to detect some phonological variation in the form: *või, võ, u* (for these forms, see also Kettunen 1938: 502). The text collections by

Kettunen (1925) and Setälä (1953) indicate that *u* is characteristic of West Livonian and Īra[4], e.g., (11) was recorded in Īra.

(11)   CLiv: ***U ma võib lā'dõ?*** (Kettunen 1925)
           Q 1SG can:1SG go:INF
           'Can I go?'

Table 3 shows examples containing VÕI in the studied varieties. It does not include Russian, as VÕI has only spread to Latvian and Latgalian. It also does not include Kraasna, as we were not able to find any examples showing use of VÕI (cf. Table 2 in Section 3).

Table 3. VÕI used in polar and alternative questions.

VÕI	Est	Mul	Khn	Vro	Set	Lut	Lei	SLiv	CLiv	Lav	Ltg
Polar, only I		või, võ		vai	vai		vai, võis, veis, vais	voj, vej	või, võ, u	vai	voi
Polar, only F	või, vä	või, võh	ve, vä, või	vai	vai, vaih, vah	va					
Polar, I + F	kas + või, vä	ka + võh	kas + ve, vä, või	kas + vai	kas + vai, vaih	kas + vai	veis + vai				
Altern, (I +) coordinator	Ø/ kas + või	Ø/ ka + vai, võ, või	Ø/ kas + või	Ø/ kas + vai	Ø/ kas, ka/ vai + vai, va	Ø/ kas/ vai + vai		vej + vaj/ vej	või, u + või, agā	Ø/ vai + vai	Ø/ voi + voi

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4   The Livonian spoken in Īra village was a transitional variety and showed characteristics of both West and East Livonian.

The studied varieties differ in terms of the position of VÕI and whether it is the main or only an additional means for forming polar questions. As in Livonian, also Latvian *vai* and Latgalian *voi* commonly appear in initial position. According to Kalnača & Lokmane (2021: 470), Latvian *vai* can occur in final position, but its task is primarily to express doubts and dissatisfaction (12). Examples suggest that the Latvian sentence-final *vai* is added to a declarative clause as a separate unit and could thus be regarded as a tag rather than as a particle integrated into the sentence. For this reason, Latvian sentence-final *vai* is not included in Table 3.

(12) Lav: *Viņš dzimteni pārdod, **vai**?!* (Kalnača & Lokmane 2021: 470)
3SG.M motherland.ACC.F sell.PRS.3SG Q
'He is selling his motherland, is he?!'

In the Estonian varieties, in turn, instances of VÕI appearing in initial position as the only polar question marker are rare. A more common way is to encode a polar question by means of VÕI as the only polar question marker in final position (13) or as an additional polar question marker in final position accompanying KAS in initial position (14). Only Leivu showed clear preference towards using VÕI in initial position, as 11 out of 12 examples of polar questions formed with a particle contained VÕI in initial position (e.g., 15). Leivu also contained examples of VÕI appearing in both initial and final positions (16).

(13) Est: *toitu vist veel ei saa **vä**?* (etTenTen)
food.PRT probably yet NEG get.CNG Q
'Probably one cannot get food yet?'

(14) Mul: ***ka** maha putti **võh**?* (Laande & Todesk 2013)
Q ground:ILL fall:PST.3SG Q
'Did it fall down?'

(15) Lei: ***Võis teil** is ole külm ši kevaja?* (Mets et al. 2014: 101)
Q 2PL:ADE NEG.PST be.CNG cold that spring
'Weren't you cold that spring?'

(16) Lei: ***Veis** täil sääl maa vallan ka uom souri mõtsu **vai?*** (Mets et al.
2014: 71)
Q 2PL:ADE there land.GEN PP also be.3SG big.PL.PRT forest.PL.PRT Q
'Do you also have big forests there in the inland?'

As Table 3 illustrates, formation of alternative questions generally
follows the pattern used to form polar questions (e.g., see the occur-
rence of Ø + VÕI in the Estonian examples 13 and 17; KAS + VÕI
in the Mulgi examples 14 and 18). Still, Seto and Lutsi showed the
additional pattern VÕI + VÕI (see 19 and 20), which means that for
alternative questions, Seto and Lutsi also show similarities with the
varieties spoken in Latvia. Although the dataset did not contain any
examples of alternative questions in Leivu, VÕI + VÕI seems the most
likely; furthermore, the correlative conjunction in Leivu is formed using
VÕI + VÕI.

(17) Est: *Tahate minna kohe **või** homme?* (etTenTen)
want:2PL go:INF now or tomorrow
'Do you want to go now or tomorrow?'

(18) Mul: ***ka** sii olli unel **võ** ilmsi* (Ilves et al. 2021)
Q this be:PST.3SG sleep:ADE or reality
'Was it in a dream or reality?'

(19) Set: ***vai** no nii **vai** nii* (Saar et al. (in preparation))
Q now so or so
'Is it now one way or another?'

(20) Lut: ***Vai** hüäga annat ar rahā **vai** surma tahat?* (Mets et al. 2014: 153)
Q good:COM give:2SG away money.GEN or death.PRT want:2SG
'Will you give (me) the money willingly or do you want to die?'

The other studied varieties in addition to Livonian also showed
variation in phonetic form depending on position (initial or final) and
function (question particle or coordinator), e.g., cf. Estonian *või* vs. *vä*,
Kihnu *või* vs. *ve*, *vä*. The variants ending in *-h* in Seto (*vaih*, *vah*) and
Mulgi (*võh*) appear to be restricted to final position (see Table 3). Out
of 11 instances of VÕI, Leivu data included 10 instances of *vais ~ veis
~ võis* – a fusion of the disjunction marker and the clitic *-s* when used in

initial position. There are several examples that cannot be regarded as instances of accidental fusion, e.g., in (15) and (16), the following word begins with *t*. The fact that there was only one example of *vai* appearing in initial position also shows that the forms ending in -*s* are common.

4.2. KAS

Occurrences of KAS as a polar question marker in Livonian were considerably less frequent than VÕI, which could be found in different sources and time periods. Only one instance of KA(S) used as a polar question marker could be found in Setälä (1953), which includes the language use of the turn of the 20th century (see example 21). A majority of examples originated from two sources: a Livonian primer (Stalte 2011; see example 22) and the New Testament (ŪT 1942). Both were compiled in the 1930s, which marks the period when Standard Livonian was developed. It is possible that there was an attempt to (re)introduce KAS following the Estonian model (cf. Table 4). Kettunen (1938: 108) also mentions the possibility of KAS being an Estonian loan. As Kōrli Stalte compiled the primer and translated ŪT, using KAS could be regarded as his conscious choice. By comparison, all examples containing a polar question particle in Pētõr Damberg's primer (Damberg 1935) were instances of *või* or *võ*. The Gospel of Matthew published in 1880 (see ME 1880) also tends to contain VÕI where the respective passages in ŪT (1942) contain KAS, e.g., see Matthew 6:26.

(21) CLiv: ***ka** sa min' läpši ka ku'opist?* (Setälä 1953)
      Q 2SG 1SG.GEN child.PL.PRT also take_care:PST.2SG
      'Did you take care of my children, too?'

(22) CLiv: ***Kas** sa tuodlistiz siedā äd tīeda?* (Stalte 2011)
      Q 2SG really this:PRT NEG.PRS.2SG know.CNG
      'You really don't know this?'

It should be noted that the primer by Stalte (2011) only contains polar questions formed using KAS, while VÕI appears as a coordination marker. Furthermore, in Stalte (2011), KAS is also used as a subordinating conjunction (e.g., 23). A few examples of KAS used as a subordinating conjunction are also found in Setälä (1953:

304, 458–459), whereas in other sources, VÕI tends to fulfil this function. The Salaca Livonian dataset contained only one instance of KAS, which appeared in an indirect question (24). By comparison, Sjögren & Wiedemann (1861: 226) list two examples, both of which are from Courland Livonian (one where it functions as a polar question marker and one as a subordinating conjunction). The few examples in Setälä (1953), Sjögren & Wiedemann (1861), and the one Salaca Livonian example (23) suggest that KAS had a native basis but VÕI ultimately took over.

(23) CLiv: *Äb tīeda, **kas** sinstõ tulāb õigi kūoršindpūstiji* (Stalte 2011)
             NEG.PRS.3SG know.CNG whether 2SG:ELA come:3SG real chimney_
             sweep
             'One does not know whether you will become a real chimney
             sweep'

(24) SLiv: **ma tju/kjyzub sinust **kas** sin om raånt.* (Winkler & Pajusalu 2016:
             120)
              1SG ask:3SG 2SG:ELA whether 2SG.GEN be.3SG book
             'I am asking you whether you have a book'

Table 4. KAS in polar questions and alternative questions.

KAS	Est	Mul	Khn	Vro	Set	Lut	Kra	Lei	CLiv
Polar, I	kas	ka, kas	kas	kas	kas	kas	kas	kas	kas, ka(s)
Polar, I + F	kas + või, vä	ka + võh	kas + ve, vä	kas + vai	kas + vai, vaih	kas + vai			
Alternative	kas + või	ka + vai, võ	kas + või	kas + vai	kas + vai, va	kas + vai			

Unlike VÕI, which has also spread to Latvian and Latgalian, the question particle KAS is only found in the Finnic varieties (cf. also Table 2). As Table 4 illustrates, KAS tends to be the sole marker of a polar question in initial position in Courland Livonian and the SE language islands (e.g., 21–22). In the Estonian varieties spoken in Estonia, sentence-initial position prevails but a combination with VÕI in final position is also common (e.g., 25).

(25) Khn: ***Kas** sia üed mõestad kududa **ve**?* (Leas et al. 2016)
           Q 2SG belt:PRT can:2SG knit:INF Q
           'Can you knit a belt?'

In the SE language islands, Leivu again patterns with Livonian rather than with Lutsi and Kraasna. The Leivu data contained only one example of *kas* (as opposed to 11 examples of VÕI, cf. Section 4.1). By comparison, although the Kraasna data are scarce, 5 out of 6 examples were instances of *kas* (e.g., 26). The Kraasna data did not contain any examples of alternative questions but there was an example of *kas + vai* used as a correlative conjunction (27). This suggests that this method could also be used to form alternative questions.

(26) Kra: ***kas** sa nu vilˊänt śei?* (AES 202: 19)
           Q 2SG now enough eat:PST
           'Did you eat enough now?'

(27) Kra: *vingjäl tseàl om mitu vikà: **kas** om*
           whining:ADE pig:ADE have.3SG several problem.PRT PTCL be.3SG
           *maa külmäne **vai** (om) kärz haìge.* (Mets et al. 2014: 290)
           ground freeze:ACT.PCTP or (be.3SG) snout sick
           'A whining pig has several problems: either the ground is frozen or [its] snout hurts'

The analysis above reveals that in Livonian and Leivu the use of KAS is marginal, while the use of VÕI as a polar question marker prevails (cf. Section 4.1).

4.3. AGĀ

The Courland Livonian data also contained examples of *agā* used as a polar question particle (e.g., see 28–29), although it is not entirely neutral but involves supposition or doubt as well (see also Tomingas 2022: 104). There were also borderline cases, which allow for the particle to be interpreted either as an interrogative or a coordination marker (30). Unlike VÕI and KAS, the particle AGĀ turned out to be marginal in all sources and time periods. The Salaca Livonian data did not contain a single instance of AGĀ, neither as an adversative,

disjunctive nor as an interrogative marker (see also Sjögren & Wiedemann 1861: 223–224).

(28)   CLiv: *izānd küzīz: "**agā** sa ūod lieudõn midāgid?"* (Setälä 1953)
        master ask:PST.3SG Q 2SG be:2SG find:ACT.PST.PTCP.SG something.PRT
        'The master asked: "Have you found anything?"'

(29)   CLiv: ***Agā** ve'l mingi rištīng tiedub midāgist i'ļ sīe*
        Q PTCL some person know:3SG something.PRT over this.GEN
        tapāmis kītõ? (Kettunen 1925: 49)
        murder.GEN say:INF
        'Is there anyone else who can say something about the murder?'

(30) CLiv: *ikš u'm ē Vāldanum. **agā** tēg siedā tīedat ka?* – TV: *nā̃*
        (AEDKL[SUHK0506-01])
        one be.3SG PTCL Vāldanum but 2PL this:PRT know:2PL also
        'One of these is Vāldanum. But [do] you know this? – TV: yes'

As mentioned earlier, Courland Livonian *agā* developed into an interrogative marker from an adversative conjunction directly or via a disjunctive conjunction (see the comment in Section 3.2). The primer by Damberg (1935) included several instances of *agā* in its disjunctive function, e.g., see (31), where it is used as part of a correlative conjunction. In other sources, examples of disjunctive coordination were limited or non-existent. One example of an adversative usage was found only in Loorits' texts; this function appears to have been rare already in the 19th century (see Sjögren & Wiedemann 1861: 223). Loorits' texts also contained one example of *agā* as a subordinating conjunction (32) (cf. Sections 4.1 and 4.2 for the use of KAS and VÕI in a similar manner).

(31)   CLiv: *Vanād kalāmī'ed jubā tundõbõd viedāmizõst, või*
        old:PL fisherman:PL already know:3PL net_pulling:ELA whether
        *līb **agā** ä'b lī ka'ļḑi.* (Damberg 1935)
        will_be:3SG or NEG.PRS.3SG will_be.CNG fish.PL.PRT
        'Old fishermen already know when a net is being pulled whether there will be fish or not.'

(32) CLiv: *Si'z ta mõtlõn,* **agā** *se nai āndab ka appõnd semḍi* (Loorits 1922)
        then 3SG think:ACT.PST.PTCP.SG whether this woman give:3SG also
        sour:PRT milk.PRT
        'Then s/he thought whether the woman also gives sour milk'

Alternative questions give further insight into the usage of *agā*. Namely, although it occurs as an internal coordinator in both East and West Livonian (e.g., 33 and 34; see also 31), there are no instances of AGĀ + AGĀ (see also Table 5). This also suggests that its use as a question particle was sporadic and instead we are dealing with a development that stopped along the way. Further research is needed to better understand the polysemous AGĀ in its various usages and its paths of development.

(33) CLiv: ***Või** mēg tǭ'mõ tūlda kuodāj tāgiž **agā** lā̄'mõ mūzõ*
        Q 1PL want:1PL come:INF home.ILL back or go:1PL elsewhere:ILL
        vȭrõs pūolõ? (Kettunen 1925; East Livonian, Sīkrõg)
        foreign:ILL PP
        'Do we want to come back home or should we go to other foreign
        places?'

(34) CLiv: *Kis sī'ḍ võ̜likšõb,* **u** *izānd* **agā** *jemānd?* (Setälä 1953; West
        Livonian, Lūž)
        who here govern:3SG Q master or mistress
        'Who is in charge here, the master or the mistress?'

Table 5. AGĀ in polar questions and alternative questions.

	Lut	**CLiv**	**Ltg**	**Rus**
Polar, only I	a	agā	a	a
Altern, (I +) coordinator		või, u + agā		

Previous research on Standard Estonian does not consider *aga* to be a polar question marker as it only appears in a few fixed usages, typically consisting of a single phrase involving a modal particle or conditional *kui* (see more in Metslang, Habicht & Pajusalu 2017). The other Estonian varieties included here also did not seem to suggest broader use (cf. also Section 3.1), thus, they are not included in Table 5. The Lutsi data, however, contained a few examples of polar questions where

a seems to function as a question marker (e.g., 35). This could also be considered possible due to the fact that in Latgalian – the main contact variety of Lutsi – *a* may occur instead of the particle *voi* or *ci* (see Nau 2011: 92), as in (36). Russian *a* also displays limited use as a question marker (see Tolkovye, sub *a*).

(35) Lut: ***a mõstat sa laula?*** (Mets et al. 2014: 128)
             Q can:2SG 2SG sing.INF
             'Can you sing?'

(36) Ltg: *"A tu zyni, kas ir Vinsents van Gogs?" "Nui".* (Nau 2011: 92)
             PTCL 2SG know:PRS.2SG who be.PRS.3 Vincent van Gogh yes
             'Do you know who Vincent van Gogh is? Yes.'

Comparison of the Courland Livonian *agā* and Lutsi *a* indicates that whereas both are used in the adversative function, only the former appears as a disjunctive marker and as a subordinating conjunction. In this respect, Lutsi *a* is more similar to the markers in Latgalian and Russian. Still, it is not possible to determine whether Lutsi *a* is a shortened form of *aga* (cf. Section 3.1) or a borrowing from Latgalian or Russian. It is important to note here that Latgalian *a* could also be a shortening of the Latvian question particle *ar* (e.g., Endzelin 1923: 118, cf. also Section 1) or a Russian borrowing.[5]

4.4. Other ways of forming polar questions

In various European languages, a characteristic way of forming polar questions is verb fronting; this is especially typical of the Germanic languages (König & Siemund 2007: 17; see also Section 1). In Livonian, this strategy was noted as marginal already by Sjögren & Wiedemann (1861: 230–231, 265); (37) is presented as one of the few examples of its use. Our Livonian dataset shows that this strategy also did not spread later, as we were able to find only a few clear cases. *Ūod sa nānd* in (38) can be compared to *sa ūod nānd* 'you have seen' in a declarative sentence. By comparison, due to the possibility of dropping the pronoun, (39) can be considered an instance of sentence-initial pro-drop rather

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5   We are thankful to the anonymous reviewer who pointed this out.

than an example of inversion, as there is no inverted element (a corresponding declarative clause would be *Sa vȯstād eņtš lōja tȭgiž* 'You will buy your ship back'). Studies on the formation of polar questions by means of change in word order in Estonian also mention the verb-initial type that cannot be regarded as inversion as there is no inverted element present (Metslang 1981: 27, Hennoste et al. 2016: 82).

(37) SLiv: *Om täma jo kaug tobli ollen?* (Winkler & Pajusalu 2018: 164)
           be.3SG 3SG already long ill be:ACT.PST.PTCP
           'Has s/he been ill for a long time already?'

(38) CLiv: *Ūod sa nānd siedā jarrõ, mis mäd meņšt tagān um?* (Stalte 2011)
           be:2SG 2SG see:ACT.PST.PTCP.SG this:PRT lake.PRT what 1PL.GEN
           pine_grove.GEN behind be.3SG
           'Have you seen the lake, which is situated behind the pine grove?'

(39) CLiv: *Vȯstād eņtš lōja tȭgiž?* (Damberg 1935)
           buy:2SG own.GEN boat.GEN back
           'Will you buy your boat back?'

Examples such as (40) and (41) show that there are also clear examples of polar questions retaining the word order of a declarative sentence. An interrogative interpretation arises primarily from pragmatic circumstances: in the case that the epistemic status of the speaker (i.e., access to the information conveyed by the clause) is lower than that of the listener, the declarative sentence functions as a question (Heritage 2012; Hennoste, Rääbis & Laanesoo 2017: 525). The answer 'yes' in (40) shows that the sentence was interpreted as a question. Still, the role of intonation in forming polar questions in Livonian needs further study to say anything decisive. By comparison, a study on Estonian revealed that spoken language intonation may support interpreting an utterance as a question but not necessarily (Hennoste, Rääbis & Laanesoo 2017; see also Section 2).

(40) CLiv: *tēg i'z sā'l mingizkõrd vȯ'ļt vȯnnõd? – jā* (AEDKL[SUHK0523-02])
           2PL NEG.PST there sometime be:PST.2PL be:ACT.PST.PTCP.PL – yes
           'Have you not been there sometimes? – Yes'

(41) SLiv: *sina uod täss?* (Winkler & Pajusalu 2016: 121)
           2SG be:2SG here
           'Are you here?'

The other studied varieties also reveal the patterns described above. Whereas in the written text the question mark may be the only indication of a polar question, in spoken language, intonation may play a role, e.g., Latvian example (42) retains the word order of the declarative clause (see Kalnača & Lokmane 2021: 470 for Latvian, see Nau 2011: 92 for Latgalian). The Finnic varieties included in the study also revealed that different types of word order are possible and that there is no preference for inversion.

(42) Lav: *Jūs dzersiet tēju?* (Kalnača & Lokmane 2021: 470)
             2PL drink.FUT.2PL tea.ACC.F
             'Would you like some tea?'

5. Discussion

Analysis of the strategies for forming polar questions in Livonian in a broader areal context confirms that the most common means is using question particles; this is also typical of the CB area in general (cf. Koptjevskaja-Tamm & Wälchli 2001: 712–714). Still, there appear to be differences with regard to the position of the question particles.

Etymologically, the most common question particles in the studied varieties are of Finnic origin. In Courland Livonian, three particles were attested: VÕI, KAS, and AGĀ (ordered from the most common to the least common). In Salaca Livonian, only examples containing VÕI occurred. In fact, VÕI appeared to be the most successful particle in the entire area. In Leivu, it was also the main means used to form polar questions. Latvian *vai* and Latgalian *voi* also originate from VÕI. Furthermore, Nau (2011: 92) states that especially in modern Latgalian texts, the particle *voi* displaces the Slavic question particle *ci* (for Latvian *vai* replacing *ar(īg)*, see Section 1). Although VÕI can also occur as a question particle in the other studied varieties, only in Livonian, Leivu, Latvian, and Latgalian is sentence-initial position clearly preferred. As Livonian and Leivu have been under the strongest Latvian influence, it is possible that the frequent use of VÕI as a polar question particle in initial position is an example of PAT-borrowing from Latvian, although originally we are dealing with MAT-borrowing into Latvian.

The multitude of MAT-transfers (see, e.g., Table 1 in Section 3.1) in this area is in line with the borrowing scale, according to which

conjunctions and particles are transferred already in the relatively early stages of contact between languages, requiring only slightly more intense contact and 'reasonably fluent bilinguals' (Thomason 2001: 69–72). These transfers well reflect the multifaceted contacts in the area. Still, the analysis suggests that although MAT-transfers may support a particular development, PAT-transfers seem to be decisive. This can be seen in the example of VÕI, as explained above.

The distribution of question particles in the studied area allows for distinguishing between two groups: (i) the Latvian-like group, which contains sentence-initial VÕI as the question particle, (ii) the Estonian-like group, which includes languages that make use of sentence-initial KAS and sentence-final VÕI. These groups also enable us to observe the paths of development of coordination particles (see, e.g., Metslang, Habicht & Pajusalu 2017). Conjunctive particles such as KAS typically emerge in sentence-initial position, where they are used to offer continuation for the preceding context. The development of disjunctive particles, in turn, reveals two paths. Either a marker used to offer an alternative to the preceding context develops into a sentence-initial question particle, or a disjunction offering a negative or a different alternative to the preceding context evolves into a sentence-final question particle. The disjunctive particles of the Latvian-like group have emerged as sentence-initial particles that relate to the preceding context; the respective development could have found support from earlier conjunctive particles such as Latvian *ar*, which also occupied the sentence-initial position (see also Section 1). Originally conjunctive KAS of the Estonian-like group also occurs in sentence-initial position. The VÕI of the Estonian-like group, in turn, adds an additional developmental path, which is based on a sentence-final disjunctive marker offering a continuation to the preceding context. The results of the present study confirm an observation by König & Siemund (2007: 15) according to which there seems to be no preference to the position of interrogative particles in SVO languages. VÕI in the studied varieties is an example of a particle appearing in both positions.

It is important to note that in Courland Livonian, where all three markers – VÕI, AGĀ, KAS – can be used as polar question markers, they also appeared as markers of subordinate conjunctions and indirect questions. This points to language internal developments. Still, KAS in Livonian proved to be less successful than VÕI, and the development

of AGĀ seemed to have stopped half-way. A possible explanation is that a polysemous marker (conveying both disjunction and interrogation) is more likely to show areal spread; polysemy also facilitates PAT-borrowing. By comparison, the form KAS does not show its original conjunctive meaning; the Latvian conjunctive question marker *ar* has also faded from use (cf. Section 1). Thus, it may be that a MAT-borrowing, which is not supported by a connection with coordination, is unable to spread.

Inversion, which is characteristic of the Germanic languages and listed as a SAE feature (Haspelmath 2001), appeared to be marginal. This suggests that formation of polar questions is a domain, which has not been subject to considerable Germanic impact. At least in the Central Baltic area, it seems to be the case that one particle could be replaced with another particle rather than with an entirely new strategy (inversion). The dataset also contained examples of verb-initial interrogative sentences that partly resemble inversion, but due to the lack of an inverted element cannot be regarded as such; they could serve as cases of pro-drop. In Russian, inversion is combined with the clitic interrogative particle *li* occurring in the second position. This resembles the Finnic clitic *-ko/-kö*, found in Finnish and other Northern Finnic languages. Formation of questions using clitics characterises neither the Southern Finnic nor the Baltic varieties studied here. This also concerns Kraasna, where Russian influence was the strongest. In a nutshell, only the model that involves a question particle in the sentence periphery shows spread in the studied area; other models have either lost or show no productivity.

6.   Conclusions

The present paper studied strategies for forming polar questions in Courland Livonian and Salaca Livonian. The Courland Livonian examples were collected from various sources and different time periods; mainly written sources were used. The Salaca Livonian examples represented the language use of the mid-19th century. The results were analysed in a broader areal context by considering five Estonian varieties (Mulgi, Seto, Võro, Kihnu, and Standard Estonian), three South Estonian language island varieties (Leivu, Lutsi, Kraasna),

and two Baltic varieties (Latgalian and Latvian) spoken in close proximity.

The results were in line with previous accounts, which stated that using a particle is the most common way of forming polar questions in this area. With respect to developmental paths, question particles of disjunctive and conjunctive origin were detected, which is again typical of the Central Baltic area. The dataset also included examples of inversion, but, as hypothesised, this strategy had remained marginal over time. As we did not carry out any acoustic analyses, we are not able to say anything decisive about the role of intonation.

As expected, VÕI in Livonian appeared to be the most widely used polar question particle occupying the initial position. In Salaca Livonian, VÕI was, in fact, the only particle that occurred in texts. The usage of VÕI revealed striking similarities with the corresponding markers in Latvian, Latgalian, but also Leivu. It could be argued that although originally Latvian *vai* and Latgalian *voi* are MAT-transfers from Livonian or South Estonian, further development has involved PAT-transfer in the opposite direction. Leivu, where Latvian influence has been the strongest among the three SE language islands, serves as additional evidence. Thus, our second hypothesis finds support. By comparison, in the other studied varieties (Estonian varieties spoken in Estonia but also Lutsi and Kraasna), VÕI hardly ever appears as the sole polar question marker in initial position. In these varieties, KAS prevails, although VÕI can be found as an additional marker or the only marker in sentence-final position.

Courland Livonian also contained KAS and AGĀ as polar question markers. As expected, their usage was more restricted. KAS turned out to be a polar question marker that was apparently of native origin (a few instances of KAS could be found in the language use of the turn of the 19th and 20th century), but was gradually surpassed by VÕI. The numerous examples of KAS in the primer by Kōrli Stalte and in the New Testament also translated by him (both compiled in the 1930s) suggest that there was an attempt to (re)introduce KAS following the Estonian model. Later sources of Livonian, however, revealed no major success. The particle AGĀ appeared to be the most marginal of the three; it also denotes additional meanings and could not be associated with any particular sources, time periods, or varieties. Additionally, VÕI

also showed some variation depending on the area, e.g., the variant *u* occurred in West Livonian and Īra.

In general, this study showed that the apparent similarities between polar question markers in Livonian and neighbouring cognate and non-cognate contact varieties display various intertwined processes: shifts in the usage of native words and loanwords, similarities in marking strategies of polar questions, PAT-transfers, etc. The entire area shows the spread of coordination-based question particles. With respect to the grouping, i.e., Latvian-like vs. Estonian-like, both Livonian varieties fall into the Latvian-like group together with Latvian, Latgalian, and Leivu, which is dominated by use of sentence-initial VÕI. Still, these groupings are not always clear-cut, e.g., although restricted, occurrence of KAS in Courland Livonian and Leivu revealed some similarities with the Estonian-like group. AGĀ, which represents a development that stopped half-way, deserves a study of its own.

Acknowledgements

Abbreviations

1,2,3 – person, ACC – accusative, ACT – active, ADE – adessive, ALL – allative, CL – clitic, CLiv – Courland Livonian, CNG – connegative, COM – comitative, COND – conditional, CONJ – conjunction, DAT – dative, ELA – elative, Est – Estonian, F – feminine, FUT – future, GEN – genitive, ILL – illative, INE – inessive, INF – infinitive, Kra – Kraasna, Lav – Latvian, Lei – Leivu, Ltg – Latgalian, Lut – Lutsi, M – masculine, Mul – Mulgi, NEG – negative, NOM – nominative, PL – plural, PP – postposition, PREP – preposition, PRS – present, PRT – partitive, PST – past, PTCL – particle, PTCP – participle, Q – question particle, REFL – reflexive, Rus – Russian, Set – Seto, SG – singular, SLiv – Salaca Livonian, Vro – Võro

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Kokkuvõte. Miina Norvik, Helle Metslang, Karl Pajusalu, Eva Saar: Liivi keele üldküsimused areaalsel taustal. Artiklis analüüsitakse üldküsimuse vormistamise strateegiaid ning nende kujunemise allikaid kahes liivi keele põhikujus – Kuramaa liivi keeles ja Salatsi liivi keeles. Tulemused näitavad, et mõlemas on üldküsimusi moodustatud peamiselt lausealguliste partiklitega. Liivi keele üldküsimuste struktuuri võrreldakse areaalselt lähedaste keelte ja murrete moodustusviisidega. Selline mikroareaalne võrdlus võimaldab sügavuti analüüsida Balti areaalis leiduvaid põhilisi üldküsimuste vormimalle ning nende arenguteid. Artiklist ilmneb, et mitmel juhul osutuvad sarnaseks liivi, läti, latgali ja lõunaeesti leivu keelesaare üldküsimuste moodustusviisid, erinedes eesti keele, lõunaeesti murdekujude ning lõunaeesti lutsi ja kraasna keelesaare üldküsimuse moodustusest. Andmestik on kogutud mitmesugustest eri aegade allikatest ning seda on analüüsitud kvalitatiivselt.

Võtmesõnad: küsipartiklid, konjunktsioon, disjunktsioon, keelekontaktid, lõuna-läänemeresoome keeled, balti keeled

Kubbõvõttõks. Miina Norvik, Helle Metslang, Karl Pajusalu, Eva Saar. Līvõ kīel iļammizt kizzimizt areāl kontekstõs. Kēras sōbõd vaņtõltõd amnämniz kizzimiz lūomiz stratēgijd ja nänt ovātõd kõds līvõ kīel vīṭs – Kurmō līvõ kīels ja Salāts līvõ kīels. Tuņšlimi nägṭõb, ku mõlmis sōbõd kõlbatõd partikõld, mis irdistiz ātõ lieudtõb kītõm īrgandõksõs. Kēra ītlõb līvõ kīel amnämnizt kizzimizt struktūrõ seļļizt īž struktūrõdõks munt ležgõlizt kēļši ja kīelmūrdis. Seļļi ītlimi äbṭõb tuņšlõ amā sagdidi amnämnizt kizzimizt formõd modelidi ja nänt suggimizt Vāldamier areāls. Nei īž tuņšlimi nägṭõb, ku amnämnizt kizzimizt struktūr pierrõ līvõ kēļ, leṭkēļ, ladgal kēļ ja jedālēsti leivu kīelkõla ātõ jõvāgid ītizt – nēši kēļši struktūrõd ātõ mõitizt äbku ēsti kīels, jedālēsti kīelmūrdis, jedālēsti Lutsi ja kraasna kīelkõlis lieudtõb. Tieutõd tuņšlimiz pierāst ātõ kubbõ pandõd īžkižist ovātist ja tuņšlimiz pierāst sōbõd kõlbatõd kvantitatīvizt metõdõd.