Abstract
120 words, up to 150

Keywords: 5-10

1 Introduction
18 years have now passed since the seminal publication Koptjevskaja-Tamm & Wälchli (2001) that considerably advanced the research on the Circum-Baltic (CB) area hitherto. Their claims and methodological suggestions still hold. However, the aim of the present contribution is not to recapitulate their findings but to amend the picture by the research results achieved since then (§2) as well as to address conceptual (§3) and methodological (§4) questions of areal linguistics in general and the Circum-Baltic area in particular.

The Circum-Baltic area – term introduced in Dahl & Koptjevskaja-Tamm (1992) – is an established linguistic area with some subareas, extensively discussed in the literature (cf., inter alia, Matthiassen 1985, Stolz 1991, Klaas 1996, Nau 1996, Dahl and Koptjevskaja-Tamm, eds. 2001, Wälchli and Koptjevskaja-Tamm 2001). It comprises the following subfamilies of the Indo-European stock: East Slavic (Russian, North-Western Russian dialects, Belarusian, West Russian variant of Old Church Slavonic), West Slavic (Polish, Regional Polish or polszczyzna kresowa), Baltic (Lithuanian, Latvian, Latgalian), West Germanic (Low German, High German, Yiddish), North Germanic (Swedish, Danish), marginally Romance (Latin), Romani (Indo-Aryan) as well as most of the languages of the Finnic subfamily (Livonian, Estonian, Finnish, Veps, Karel, Votic, etc.) and Saami subfamilies of the Finno-Ugric stock and, finally, Karaim which belongs to the Kipchak (Northwestern) subfamily of the Turkic stock. This area is thus largely dominated by the Indo-European stock. This is despite the fact that historically Indo-European languages immigrated into this region much after the Finno-Ugric immigration.

Jakobson (1931) was probably the first to investigate the impact of this area on the distribution of prosodic phenomena, foremost, the lexical pitch. Subsequently, a number of phonologically oriented treatments of the area appeared (Lehiste 1978, 1983, 1988; Wiik 1995, 1997). Lexical pitch has played a prominent role in a number of subsequent studies on the area as well (Haarmann 1976; Mathiassen 1985; Stolz 1991; cf. the overview in Koptjevskaja-Tamm & Wälchli 2001: 622-623).


Moreover, larger combinations have also been suggested, for example, Eastern Baltic Sprachbund, i.e. a combination of (i), (iii) and partly (iv) in Mathiassen (1985) or Seržant (2015a, 2015b). Indeed, in contrast to the languages on the eastern coast of the Baltic sea,
western CB languages behave very much like Standard Average European languages (Koptjevskaja-Tamm & Wälchli 2001: 732). Having said this, a number of isoglosses may be postulated for the entire area as long as we do not expect to find the exact match. For example, I argue below that – at somewhat lower degree of granularity – spatial cases may be considered to be subject to an areal impact in the whole area. Another example is lexical borrowings from Low and High German – something that is found in all languages of the area, even though these are not the same lexical items across all languages.

2 Historical background

We do not know anything about the languages of the tribes that settled in the area before the major present-day linguistic groups of the area arrived. Saami constitute the first immigration wave followed by the closely related Finnic population. They were ensued by Balts, subsequently, Slavs. The western part of the area, Scandinavia, was gradually settled by North Germanic tribes arriving there from Denmark. The western (Scandinavia) and the eastern (Finnland, Baltic states, Belarusia, Poland and West, North-West of Russia) parts of the area existed fully independently from each other for a long period time, basically, up until the historical period. At the same time, they both were subject to longitudinal Finnic and Saami substrate effects.

North Germanic tribes entered the eastern coast of the Baltic sea – including Northern Poland and Baltic states – some time during the so-called Viking age (800-1000 AD). Thus, words such as simkala (Zemgale, the central region of Latvia), uitau (the Latvian city Ventspils, German Windau) or ljijflant ‘Livonia’ (cf. German Livland) or uirland (< Vir-land < Estonian Viru-maa) are found in a number of runic inscriptions in Scandinavia (Eliasson 2017: 2049). This is also the time of more far-reached contacts. The expansion of Christianity in the area started by the end of this period and was accomplished at different times in different parts. The erstwhile success of the Orthodox missionaries (possibly from Novgorod) in the eastern part of the area was later undone by the Crusaders, primarily by the German Teutonic and Livonian orders. Nevertheless, a number of Old Russian terms survived in Lithuanian, Estonian and Latvian until nowadays, cf. Latvian baznīca and Lithuanian bažnyčia from East Slavic, Old Russian božnica/božnica ‘church’ (Sreznevskij I.143; Seržant 2006).

After a short period of Danish dominance in the Baltic Sea, Middle Low German and subsequently High German – especially during and after the Reformation – became the dominant language of the area. This was due to the enormous success of the Hanseatic League as well as the military success of the Teutonic and Livonian orders in Livland – largely covering present-day Estonia (except for the Tallinn region, the islands Saaremaa and Läänemaa which were Danish) and Latvia – that succeeded up until the Russian city of Pskov. The language of merchants was not only Low but also various subdialects of High German as is evidenced by contracts and documents from the area. These were often composed in the respective subdialect of the scribe. Features of Low and High German dialects occurring in one and the same document were not uncommon because no “standardized Low German” ever existed. Gradually Low German was entirely replaced by High German and then by Baltendeutsch in the Baltic states.

German lexical borrowings are found in all languages of the area with no exception, in Scandinavian perhaps even more than elsewhere (Winge 2017). Moreover, German continued to be a superregional language even after the demise of the German orders in 16th century when Sweden became the dominant power in the Baltic region, while Poland controlled the East Slavic and Lithuanian territories of the former Grand Duchy of Lithuania. Since the Nordic War (1700-1721) Russia increasingly becomes the dominant language in the Eastern part of the area up until the fall of the Soviet Union in 1991.
To summarize, the Circum-Baltic area has never been politically unified with one dominant language. Instead, different languages Danish, Swedish, Old West Russian and Russian, all stemming from the area, dominated a particular subpart of the area (Koptjevskaja-Tamm & Wälchli 2001: 728). It is probably only German (and to a minor extent Medieval Latin) that has been a lingua franca in all parts of the Circum-Baltic area during the prosperity of the Hanseatic League.

3 Selected phenomena

There is a vast literature discussing particular contact phenomena between languages of the area. Language contact is typically a process in which two languages are involved while larger, areal effects are due to multiplication of bilateral contact situations. This is probably the reason why only few studies since Koptjevskaja-Tamm & Wälchli (2001) have concentrated on discussing recurrent phenomena in more than two languages. In what follows I discuss two phenomena of the area in which more languages are involved: vowel harmony and spatial cases.

Finnic languages typically have vowel harmony, exceptions being only Livonian and Estonian apart from South Estonian Võru (Stolz 1991: 38-39; Koptjevskaja-Tamm & Wälchli 2001: 628). It is the stressed vowel that conditions the vowel quality of other syllables. Western Russian and Belarusian dialects also attest sound changes conditioned by harmony with the vowel quality of the stressed syllable. Thus, the unstressed -e- is realized either as -a- or as -i-/e-, depending on the quality of the vowel in the stressed syllable. For example, s’estrá > s’astrá ‘sister’ as opposed to the non-change in v’el’ik’im ‘great.INS.SG’ (standard also v’el’ik’im) due to the absence in the former and presence in the latter of a front vowel (cf. Seržant 2010: 199).

Also Baltic languages – very much in parallel to the East Slavic dialects – underwent a number of sound changes based on vowel harmony. While Proto Latvian underwent one type of harmonic vowel changes in its history, predating the split of Latvian into dialects, East Latvian or Latgalian underwent another three harmony-conditioned changes, e.g. e...a/u > e ...a/u > Latgalian a...a/u but e...i/e > (i)e...i/e or Latgalian i...a/u > y...a/u but no change in the environment of a front stressed vowel i.../i/ (Seržant 2005). Moreover, South-East Lithuanian dialects underwent similar changes on harmonic basis: medús > madís ‘honey’ (cf. Latgalian mads < medus ‘honey’) but mergiot’a ‘girl’ (< standard mergiotė). In all these languages except for Latvian and Latgalian, it is the stressed syllable that determines the harmony. However, since the harmonic changes of Latgalian and pre-Latvian are demonstrably very old phenomena (Seržant 2005), they might have predated the loss of the old word-final stress patterns as well. It is thus likely that the harmony-driven changes of Pre-Latgalian were conditioned by the stressed vowel as well.

To summarize, vowel harmony must have played a role in all three branches at an earlier period: Finnic, East Slavic and Baltic. Finnic must have exercised an impact on the latter two which only to some extent rendered harmonic alternations. In a second wave, a number of harmonic systems were commonly given up in the area of most intensive contacts with German and/or Russian. Estonian (but not South Estonian) and Livonian gave up vowel harmony entirely. In the same way, Latgalian and East Slavic remodelled harmonic alternations by levelling, thus almost entirely removing the traces of previously harmonic patterns.

I turn now to spatial cases. The case system, in particular, the system of spatial cases may be considered to be areal influence (Balode & Holvoet 2001: 44). Finnic

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1 Old West Russian chancery language of the Grand Duchy of Lithuania – although highly dominated by the South-Slavic Old Church Slavonic – may nevertheless be considered to be largely a local variant.

2 For example, cys ‘another one’ has generalized -y- also in those cases in which it was originally absent, e.g. cít-i > cýt-i ‘another-NOM.PL. in analogy to cýt-am ‘another-DAT.SG’.
languages are well-known for having a set of spatial cases such as ellative, inessive, illative, adessive or allative morphologically derived from more basic cases via case stacking. Analogically, Baltic languages have grammaticalized the following new spatial cases via case stacking: the illative case from the accusative amended by the postposition -na, the allative case from the genitive with the postposition -p(r)i, the inessive case from the locative with the postposition *-ēn, and the adessive case from the locative with the postposition -p(r)i (Kazlauskas 1968: 153; Stang 1966: 228; Seržant 2004a, 2004b, 2004c).

Koptjevskaja-Tamm & Wälchli (2001: 672) argue that the areal impact of Finnic on Baltic is problematic here for the following reasons: (i) new grammaticalized spatial cases are also found elsewhere in Indo-European – Umbrian, Tokharian and Ossetic – and may therefore be historically accidental in Baltic; (ii) there is only partial functional overlap between the spatial cases in Baltic and Finnic, e.g., body parts locations as targets of dressing are coded with in-cases in Finnic but with the on-preposition in Lithuanian, or, the verb ‘to stay’ requires the illative in Finnic but inessive in Baltic, and (iii) this functional “incompatibility of the Finnic and Baltic local case systems” was removed only in Latvian and Livonian. However, I claim that they are overly pessimistic.

First (i), quite in parallel, the new spatial cases in other Indo-European languages indeed emerged due to a strong areal influence: Tokharian was heavily influenced by Turkic languages (Old Uyghur) whereas Ossetic is certainly heavily influenced by some Caucasian language, for example, Georgian (Kartvelian) or Ingush (Nakh-Dagestanian) which have rich case systems. Thus, this comparison only reinforces the explanation of spatial cases of Baltic crucially based on language contact.

Secondly (ii), in some northern Lithuanian dialects and already since Old Latvian, the illative with inessive merged functionally (in the former) and morphologically (in the latter) so that the illative can also be used with the verb ‘to stay’ here as well. Furthermore, Finnic languages indeed have extended the original spatial meanings to cover more spatial and non-spatial contexts. For example, the allative and the adessive case may be used pro dativo (the predicative possessor is typically coded by the adessive case). By contrast, Baltic languages, primarily, Old Lithuanian and dialectal Lithuanian mostly attest only “literal”, spatial meanings with these cases, i.e. the adessive denoting the meaning of at the landmark, the inessive denoting the meaning in the landmark, etc. However, in fact, Old Lithuanian does attest non-spatial meanings of the spatial cases, albeit indeed rarely: the allative case may also mark the recipient – the meaning typically covered by the dative case in this language, e.g., in Chyliński’s Bible translation from 1659-1661 (cf. Range 1995; Žilinskaitė-Šinkūnienė 2016). Furthermore, the adessive case in Finnic acquired the meaning of on-landmark – a development that the Baltic adessive did not undergo.

However, a contact-induced grammaticalization rarely proceeds to exactly the same degree in the target language as it does in the donor language. Thus, the functional differences between the Baltic and Finnic systems are well-explained as due to different degrees of grammaticalization and, to this extent, Koptjevskaja-Tamm & Wälchli (2001: 672) are right that this might have inhibited the transfer of other meanings from Finnic into Baltic. However, grammaticalization clines – in which the historical development maps onto the geographic diffusion – are the default outcome of a contact-induced grammaticalization (Dahl 2001: 1468-1469). “[R]eplica categories are generally less grammaticalized than the corresponding model categories” as has been emphasized by Heine (2012: 132), cf. Wiemer & Wälchli (2012: 37). In this sense, the different degrees of semantic extension are expected and do not represent countererevidence to the claim that the spatial cases of early Baltic are due to a strong Finnic impact.

Moreover, it is important to mention the development of what, with due disclaimers, one might call “spatial cases” in Scandinavian. A very limited set of input words, all denoting different kinds of locations, may host spatial adpositional enclitics in Scandinavian. These,
crucially, do not allow for any insertions – except for the obligatory marker -i- in Swedish / -e- in Norwegian – and are, thus, more like inflectional-case forms morphologically, cf. Swedish därunder-i-från ‘under.it-IN-FROM’, var-i-från ‘where-IN-FROM’, väst-i-från ‘west-IN-FROM’ and Norwegian:

<table>
<thead>
<tr>
<th></th>
<th>Basic/Illative</th>
<th>Inessive</th>
<th>Elative</th>
</tr>
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<tbody>
<tr>
<td>hjem ‘home’</td>
<td>hjem-ø</td>
<td>hjemm-e</td>
<td>hjemm-e-frä</td>
</tr>
<tr>
<td>ned ‘down, below’</td>
<td>ned-ø</td>
<td>ned-e</td>
<td>ned-e-frä</td>
</tr>
<tr>
<td>nord ‘North’, vest ‘West’</td>
<td>-</td>
<td>-</td>
<td>nord-frä, vest-frä</td>
</tr>
<tr>
<td>der ‘there’</td>
<td>der-ø</td>
<td>der-i (old)</td>
<td>der-(i)-frä</td>
</tr>
</tbody>
</table>

Table 1: Illative, inessive and elative “cases” with some spatial words

Observe case stacking in the elative case – a morphological property that is found with spatial cases in all languages of the area.

What is more, the adposition used for the elative (Sw. från, Norw. fra ‘from’) and the one used for the inessive (Sw. i ‘in’) are prepositions in Scandinavian and cannot be used postpositionally anywhere else. The development (or, possibly, the retention from an earlier period) of postpositional enclitic variants goes thus against the rigid prepositional order of modern Scandinavian. In turn, the input restrictions may be explained by an early grammaticalization stage. Expressions most frequently occurring in spatial contexts tend generally to develop a more efficient and concise system of encoding spatial orientation (cf. Creissel & Mounole 2011). It thus does not come as a surprise that spatial cases are found in Scandinavian with words denoting spatial relations only. Moreover, although structurally similar expressions are found in Icelandic with the older elative -an, it is only Scandinavian that has renewed this marker by creating a new postpositional clitic -fra/-frän. Combinations reminiscent of these are also marginally found in other languages such as German. Here, the anaphoric and deictic dar- and hin/her may also host enclitic postpositions: dar-in ‘this-IN’ vs. dar-aus ‘this-FROM’. However, crucially, these are considerably less productive in German than in Scandinavian in terms of type frequency – no nouns and only the two particles dar- and hin/her allow them here. The functional maintenance as well as higher type frequency of such expressions in Scandinavian as opposed to other Germanic languages may be taken as evidence for an impact of Saami and Finnish spatial cases.

Finally, new spatial cases have partially emerged also in Russian as opposed to all other Slavic varieties as has been illustrated in Breu (1994). While prepositions such as na ‘on’ and o ‘about’ both take the old locative (prepositional) case in other East Slavic languages, Russian has secondarily differentiated the spatial (‘on’) from the non-spatial (‘about’) meanings formally:

(1) Russian (Breu 1994: 51)

<p>| | |</p>
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<tbody>
<tr>
<td>*na most-u</td>
<td>na most-e</td>
</tr>
<tr>
<td>*on bridge-U_LOC</td>
<td>*on bridge-E_LOC</td>
</tr>
<tr>
<td>‘on the bridge’</td>
<td></td>
</tr>
</tbody>
</table>

(2) Russian (Breu 1994: 51)

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<tbody>
<tr>
<td>*o most-u</td>
<td>o most-e</td>
</tr>
<tr>
<td>*about bridge-U_LOC</td>
<td>*about bridge-E_LOC</td>
</tr>
<tr>
<td>‘about the bridge’</td>
<td></td>
</tr>
</tbody>
</table>

3 The same phenomenon is also found in the Danish Bokmål as well. Danish is certainly a language that is more remotely related to the area. However, it has also other features typical of the area such as the suprasegmental glottal stop (stød).
The singular ending -u is originally the allomorph of the old locative (prepositional) case of the u-declension alongside the more frequent ending -e (originally belonging to the o- and a-declensions) and has always been fully synonymous to the latter. Breu (1994: 50-52) shows that, only in Russian, after the demise of the u-declension, – the former locative ending -u was reinterpreted as marking exclusively spatial relations. In turn, the ending -e is used more generally with any kind of prepositions governing the locative case, including non-spatial prepositions such as o ‘about’. By contrast, in the other East Slavic languages, namely, Ukrainian, Belarusian, as well as in West and South Slavic, this ending has either disappeared altogether (e.g. Bulgarian) or remained to be an allomorph – albeit on different conditions –, for example, in Polish or Sorbian (Breu 1994: 50). The creation of a purely spatial (locative) case in -u in Russian only is strong evidence for an areal impact of the Finnic substrate population on Russian as Breu (1994: 51) convincingly shows.

Much later, in a second wave, the system of spatial cases has been reduced in a number of the languages of the Eastern CB area. Thus, in Latvian, the different meanings of the four Proto-Baltic spatial cases may be encoded by the inessive case (traditionally the locative case) – the only case to denote spatial relations that survived in contemporary Latvian. This is only possible if the figure and the ground are in their conventional (most frequent) spatial relation such as necklace around the neck but not a snake around the neck or the hat on the head and not a bird on the head. While Kohtjevskaja-Tamm & Wälchli (2001: 672) take this as a counterevidence for an areal impact in the Baltic spatial cases, this is demonstrably a much later development independent of the rise of the spatial cases. Not only Latvian, but also North Lithuanian dialects as well as Livonian have been affected by this second wave (cf. Wälchli 1998). First, all three branches removed the morphological adessive and allative cases (these are only found with place names in Livonian and as the new dative in the Salis dialect thereof). Moreover, the illative case – although morphologically distinct in North Lithuanian – functionally merged with the inessive case. This is also the state of affairs found already in Old Latvian which also retains the illative -an (singular) and the inessive (locative) case -ā (singular). In contemporary Latvian, both subsequently merged into one case that is historically derived either from the former or from the latter (Vanags 1992: 392; 1994: 125; Wälchli 1998; Seržant 2004a).

Finally, Estonian too, shows an incipient development towards losing the adessive case in favour of adpositional phrases. The use of adpositional phrases instead of the respective spatial cases has been fostered by Swedish (Eliasson 2017: 2051) and German in Estonian, for example, with the Estonian postposition peal ‘on’ taking the genitive instead of the adessive case. Moreover, Old Latvian, germanised writings as well as some Low Latvian dialects employ the postposition iekšan/iekšā ‘inside’ with the genitive case on the nominal instead of the inessive (traditionally locative) case.

To summarize, there is thus good evidence to assume that the development of spatial cases has been subject to strong language contact in the whole area. Finnic and Saami have been the donor languages, albeit they exercised their impact on the neighbouring languages to varying degree. We observe that the encoding of spatial relations by means of case has been affected by different processes in different languages: Russian has recycled the former locative ending of the u-declension, East Baltic has encliticized former postpositions for the at- and in-cases while Scandinavian has encliticized the adpositions ‘from’ and ‘in’ with some few words. It is probable that different Finnic and/or Saami areas have been providing the input here.

In a second wave, however, Swedish and German must have played the major role in propagating the adpositional phrases gradually replacing the former spatial cases.

The chronology of these changes is noteworthy because it is recurrent in the area: the earlier layer of changes are often due to contacts with the autochthon Finnic and Saami population while the later changes are due to contacts with the politically and socially dominant
languages such as Swedish, Low/High German, Polish or Russian. Contact-induced changes related to vowel harmony as discussed above also confirm this finding. This does not apply to lexical borrowings and lexicalizations of grammatical patterns such as pluralia tantum.

Before I turn to the concept of a sprachbund (§4) and to the methodological issues related to it (§5), I list the most uncontroversial isoglosses of the area in what follows:

(i) **Initial stress**: Scandinavian, Latvian, Žemaitian Lithuanian, all Finnic languages, German, some North Russian dialects (Daugaviete 2008; Veenker 1964: 74; Koptjevskaja-Tamm & Wälchli 2001: 638-640).


(iv) **Overlength**: Estonian, Livonian, Latvian, Low German (Koptjevskaja-Tamm & Wälchli 2001: 641-644).

(v) **Pluralia tantum**: East Slavic, Baltic, Finnic, Romani (Koptjevskaja-Tamm & Wälchli 2001: 629-637).

(vi) **Pseudo-partitive-related functions pertaining to aspectuality**: Latgalian, Lithuanian, Russian, North Russian, Polish, all Finnic languages (Koptjevskaja-Tamm & Wälchli 2001: 654-656; Seržant 2015).

(vii) **Partitive (genitive) objects and subjects**: Latgalian, Lithuanian, Russian, North Russian, all Finnic languages (Koptjevskaja-Tamm & Wälchli 2001:663-666; Seržant 2015b).


(ix) **Nominative objects**: Latvian, Latgalian, Lithuanian, Russian, North Russian, all Finnic languages (Timberlake 1974; Holvoet 1993; Ambrazas 2001; Koptjevskaja-Tamm & Wälchli 2001:660-663, 667-669; Seržant 2016).

(x) **Differentiated spatial cases**: Proto-East Baltic, Old Lithuanian, Lithuanian dialects, Russian, all Finnic languages (Koptjevskaja-Tamm & Wälchli 2001:671-673; see above).

(xi) **Partitive-marked objects and subjects under negation**: Latvian, Latgalian, Lithuanian, Russian, North Russian, all Finnic languages (Koptjevskaja-Tamm & Wälchli 2001: 639-653, 656-660; Seržant 2015b; Arkadiev 2017).

(xii) **Differential case-marking of nominal predicates**: Latvian, Latgalian, Lithuanian, Russian, North Russian, all Finnic languages (Koptjevskaja-Tamm & Wälchli 2001:674-675; Stassen 2001).

(xiii) **Predicative possession**: Latvian, Latgalian, Russian, North Russian, all Finnic languages (Matthiassen 1985; Stolz 1991; Nau 1996; Koptjevskaja-Tamm & Wälchli 2001:676-679; Seržant 2015a).

(xiv) **Dative-like experiencers**: Old Scandinavian, all Finnic languages, German, Latvian, Lithuanian, Russian (Seržant 2015a).

(xv) **Comitative-Instrumental syncretism**: Scandinavian, Estonian, Livonian, Latvian, German (Koptjevskaja-Tamm & Wälchli 2001:679-682; Stolz 2001).

(xvi) **Slavic-style aspectual system**: Yiddish, Romani, Lithuanian (Pakerys & Wiemer 2007; Wiemer 2009; Kožanov 2011; Šišigin 2014).


(xviii) **Impersonals with passive-like morphology and active syntax**: Latvian, Livonian, Votic, Estonian, Finnish, North Russian, Polish (Christen 1998; Koptjevskaja-Tamm &

(xix) **Postfixes as markers of reflexivity**: Scandinavian (Haspelmath 1987; Koptjevskaja-Tamm & Wälchli 2001:691-692).

(xx) **Adjective agreement**: Scandinavian, Baltic, East Slavic, Finnic, Saami (Koptjevskaja-Tamm & Wälchli 2001: 692-694).

(xxi) **Loss of gender**: Scandinavian (M=F), Low Latvian (M=F), Belarusian (N>M/F), Proto-East-Baltic (N>M/F), Finnic (M=F=N inherited) (Koptjevskaja-Tamm & Wälchli 2001: 694-698).

(xxii) **Flexible SVO word order**: Baltic, Slavic, Finnic (Koptjevskaja-Tamm & Wälchli 2001: 704-705).

(xxiii) **Rigid possessor-possessed word order and SVO**: Scandinavian, Latvian, Finnic, some dialects of Russian, Polish and Belarusian in the Baltic region (Christen 2001; Čekmonas 2001; Koptjevskaja-Tamm & Wälchli 2001: 705-709).

(xxiv) **Mixed adpositional system as the result of contacts**: Latvian, Estonian (Stolz 1991: 81-88; Koptjevskaja-Tamm & Wälchli 2001: 710-712).

(xxv) **Yes/no-question particles clause-initially**: (Scandinavian), Baltic, Belarusian, Western Russian dialects, Polish, Yiddish, Livonian, Estonian, Southern Saami (Koptjevskaja-Tamm & Wälchli 2001: 712-714).

(xxvi) **Verb fronting in yes/no-questions**: Scandinavian, German, Estonian, Finnish, Russian (Koptjevskaja-Tamm & Wälchli 2001: 712-714).


4 The concept of a sprachbund

The Russian term *jazykovoj sojuž*, later translated into German as *sprachbund*, has been introduced by Trubetzkoy (1923, 1928, 1930) to refer to a group of languages that share common syntactic, morphotactic and phonological traits as well as a number of common cultural words but not the basic vocabulary. This concept was necessary to account for groups of languages that have a high degree of homogeneity but are genealogically unrelated. It was then applied to account for areal correlations of phonological properties in Jakobson (1931). Since then different notions have been adopted: linguistic area, convergence area, diffusion area, *union linguistique*, *affinité linguistique*, etc. (Campbell et al. 1986: 530). While for many scholars *sprachbund* and *linguistic area* are synonymous (Dahl 2001: 1456), others use these notions to cover different degrees of convergence. For example, Heine & Kuteva (2005: 172) take sprachbund to be a subtype of a linguistic area that is characterized by a set of linguistic properties but not by mutual intertranslatability.

The notion of sprachbund has traditionally been taken to refer to an hierarchical area with one epicentre from which innovations spread across the languages of the area via direct contact. This is only possible if the donor language is sociologically, culturally and politically dominant. When it comes to the CB area, it has been observed that convergence effects in this area are rather motivated by various local effects of mutual influence with different epicentres and historically layered contact effects (Nau 1996). Accordingly, Koptjevskaja-Tamm & Wälchli (2001: 626-7, 728) and Koptjevskaja-Tamm (2002) refer to the CB area as to *Contact Superposition Zone* contrasting it with the traditional sprachbund. However, CB is not atypical in this respect. Multilateral dispersions of traits are also typical for the textbook example of the Balkan sprachbund (cf. Thomason & Kaufman 1988: 95). From this it follows that not the CB area is atypical but sprachbunds with just one epicentre. Therefore, it seems that taking the notion of sprachbund to refer to a situation in which a group of languages undergo changes
radiated from one epicentre is ill-advised because such situations are too special and rare. By contrast, a contact superposition zone should be viewed as the default.

This has to do with the very mechanisms involved in the dispersion of linguistic traits across languages. Substantial adaptation of languages to each other in an area is only possible under extensive bilingualism between different languages of the area. Under bilingualism speakers employ different strategies in order to enhance shifting between languages, for example, by switching only between the phonetic codes and not between structures. This, in effect, leads to the increase of structural homogeneity in an area. While many studies on the CB area concentrate on historical events leading to different politically and socially dominant languages, bilingualism has not been much discussed and investigated here. Dominant languages certainly do considerably contribute to convergence effects but bilingualism has demonstrably a much stronger effect.

Bilingualism does not require the existence of a socially, culturally and/or politically dominant language for transfer to take place. In contrast to a dispersion from a dominant language, bilingualism cannot affect an area at once because speakers typically master only two or, maximally, three languages. Consequently, the dispersion of a linguistic trait in an area under bilingualism is mediated, layered and less faithful. It brings about a higher degree of structural homogeneity via layered and multilateral transfers with no clear epicentre – something that is typical for the CB area (Nau 1996; Koptjevskaja-Tamm & Wälchli 2001). Recall that we have observed above (§3) that the earlier layer of contact phenomena in the area are primarily based on pattern borrowing from (and into) Finnic and Saami languages. It is essential for understanding the CB area that all languages of the area have been assimilating parts of Finnic and/or Saami population: Scandinavian, Latvian, Lithuanian as well as North and West Russian.

Furthermore, the traditional concept of sprachbund requires another type of revision, namely, as to what type of correlations constitute a sprachbund. Since sprachbunds were invoked by Trubetzkoy to account for the correlations that are not due to common inheritance in mutually related languages, an area has been defined in terms of common structural traits in a group of genealogically unrelated languages (at least since Jakobson 1931; cf. Masica 1971; Campbell 1994). Thus, most of the chapters in the two volumes Dahl & Koptjevskaja-Tamm, eds., (2001) elucidate language-contact phenomena between two languages that are either entirely unrelated such as Latvian and Livonian or Estonian or only remotely related. However, the requirement for languages of a sprachbund to be genealogically unrelated, is problematic for the CB area since it primarily contains only two unrelated families: Uralic and Indo-European in addition to the marginal Karaim which is Turkic. Moreover, the Indo-European languages of the area are closely related: Slavic, Baltic and Germanic subfamilies share in general more genealogical correlations among each other than with other Indo-European subfamilies. The same applies to the Finnic subfamily of Uralic.

Yet, the requirement that the languages of an area should be largely unrelated does not seem to be meaningful if our goal is to understand how and why linguistic traits may cluster in geographically contiguous languages as opposed to more remote languages. The reason for this is that not only entirely unrelated languages may develop homogeneity by language contact but also closely related languages need to retain the same degree of homogeneity. Contact-induced inheritance is a phenomenon sui generis that is different from drift inheritance, i.e. an unmotivated inheritance, and from inheritance of universally preferred patterns that is due to universal pressures.\(^4\) In this respect, areal linguistics comes close to dialectology, more

\(^4\) Note that contact-induced inheritance does not require the languages to be genealogically related, contact languages may happen to inherit similar patterns and then retain them more faithfully by mutual influence, cf. the partitive case in Finnic languages and the partitive genitive case in Baltic and Russian, especially North Russian (Seržant 2015b).
specifically, to dialect geography. For example, Russian dialects must not only allow for the dispersion of innovations but also for keeping the same set of traits inherited from earlier periods across their boundaries in order to maintain their homogeneity. Without intensive mutual contacts, Russian dialects would diverge from each other by retaining somewhat distinct sets of inherited traits. Contact-induced inheritance, therefore, is an important mechanism to maintain homogeneity of closely related languages. A commonly inherited set of traits – if it can be shown to be persistent in related languages within but not outside an area – should also be part of the description of a sprachbund.

The same applies to contact-induced innovations in closely related languages of an area. It is just methodologically much more difficult to provide solid evidence for the dispersion of a trait in closely related than in entirely unrelated languages because the null hypotheses are the opposite for these two situations. The easier is a pattern to replicate the more difficult is it for the researcher to provide for a good evidence for the borrowing event and, vice versa. Thus, dispersion of linguistic traits is certainly easier across languages with a higher degree of similarity (due to inheritance) than across structurally very diverse languages. For example, Low German had certainly a much higher impact on Scandinavian languages than it had on Baltic or Finnic. For example, not only words but also the wholesale prefixal system (an-, be-, för-/for-, und-, miss-, etc.) and a number of suffixes such as -ag·tig, -bar, -er, -eri, -erske, -he(it)- or -else were borrowed from (Low) German into Scandinavian languages (Eliasson 2017: 2100).

Finally, there is another factor bringing about convergence effects that is traditionally considered to be complementary to genealogically and areally-driven correlations, namely, universal pressures (universalis in Greenberg 1966). Certain structures are just generally preferred in languages such as, for example, subject-before-object word orders as opposed to other logically possible combinations. Traditionally, accumulation of these features in an area is considered as trivial and thus not representing evidence for an areal impact (Dahl 2001: 1457). However, even these traits have to be taken into account when describing an area, I suggest. First, universals are only probabilistic tendencies which may be violated. To give an example, the CB area is homogenously subject-before-object on the basic word order. However, there are areas in the world where this is not the case. The Mesoamerican area, for example, although also largely preferring subject-before-object, contains some Mayan languages that have verb-object-subject as the basic word order, i.e. subject occurring after the object (cf. Campbell et al. 1986: 547). There is thus a difference between the CB and the Mesoamerican area in that the former does not allow object-before-subject basic orders while the latter does. Moreover, typologically trivial patterns are certainly easier to borrow than typological quirks – universal pressures create patterns that are particularly efficient in processing and production and are therefore easier to accommodate in a recipient language. Since the focus of areal linguistics in general and the research on sprachbunds in particular is primarily on transfer phenomena, it is an important question to ask, how universally preferred (or trivial) structures may be copied and how they expand across an area.

Secondly, trivial linguistic traits exist only on the level of the coarse-grained cross-linguistic comparison that is the methodological standard in linguistic typology for good reasons. But it is not the standard in areal linguistics which takes many more details into account. At certain degree of granularity, there will be no trivial linguistic traits anymore. Universally preferred structures may considerably vary as their type frequency and selectional input restrictions across languages. An illuminating example is the basic transitive construction – something that most of the languages have. However, languages of the world show considerable areal effects in the degree of expansion of the basic transitive pattern onto different semantic types of predicates as has been demonstrated in Say (2014). According to Say (2014), Standard Average European (as discussed in Haspelmath 2001) scores lower in the expansion of the transitivity pattern than many other languages of Eurasia. Moreover, Baltic, Russian,
Polish and Finnic form an even closer tied unit by scoring even lower than Standard Average European here (Say 2014: 138; see also Seržant 2015a). Moreover, different kinds of methods to profiling of a category found in Usage Based Linguistics (inter alia, Gries & Divjak 2009) and in areal typology (cf. Say 2014) may also elucidate areal influences of universally preferred patterns.

To summarize the discussion above, the following definition of a sprachbund (alias linguistic area) can be given:

(3) Definition of a sprachbund / linguistic area
A sprachbund represents an idiosyncratic clustering of linguistic traits in a geographical area (containing more than one lect) as opposed to a wider geographical background.

The definition in (3) is very general but it allows for sprachbunds that consist solely of related languages and even of dialects because, crucially, also contact-induced inheritance of linguistic traits and the expansion of universally preferred patterns in an area may also be due language contact, especially if these are not found outside the area. Methodologically, such a situation represents a challenge for the researcher because the null hypothesis is, of course, the lack of any areal effects here. Nevertheless, such a situation should not be excluded only because it is methodologically challenging.

5 Methodological issues

I have argued above that areal linguistics should study clustering of linguistic traits in geographic area fully independently of the genealogical historical-comparative linguistics and typology, as an independent discipline in its own right since its main goal is to understand how the distribution of linguistic traits in the world correlates with geography, sociological and political constellations. Consequently, the definition in (3) has removed a number of limitations found in the previous literature on what a description of a linguistic area may include such as clustering of inherited traits in a particular area or universal tendencies.

This definition challenges the traditional heuristics. For example, if the languages of the area are genealogically related then the null hypothesis is that these correlations are exclusively due to common inheritance while a conservative effect of the area has to be convincingly shown. The same applies to universally preferred patterns. If a trait frequently found in the area is typologically rare no additional evidence is needed to claim an areal impact. For example, the feature adjective agreement is typologically rare across world’s languages. Thus, the case and number agreement on adjectives in the Finnic languages in a contrast to other Finno-Ugric languages (Koptjevskaja-Tamm & Wälchli 2001: 692-693) is sufficient evidence to claim an impact from the Indo-European languages of the area. Analogically, if correlations are found with universally preferred patterns, then, again, the null hypothesis is that this is exclusively due to universal pressures. An areal effect has first to be convincingly argued for to defeat the null hypothesis here. In other words, a more granular approach is needed when it comes to correlations that may alternatively be explained by universal pressures or by drift inheritance (as opposed to contact-induced inheritance and inheritance of universally preferred patterns). Such an approach can rely on such tools as corpus frequency and more fine-grained profiling of traits.

Corpus frequency – both type and token frequency – has not been applied with respect to the CB area. The distinction between MAT(erial) and PAT(tern) transfers made in Sakel (2007), Matras & Sakel (2007) highlights an important aspect of the area: grammatical domains are typically affected by PAT transfers in the area. In other words, we observe different kinds of historical processes towards unification of the functional and structural aspects of grammar.
of the area with no concomitant MAT borrowing in the grammar, only in the lexicon. While traditional research on linguistic areas, in general, and on language contact, in particular, concentrates on these two types of transfer, namely, PAT and MAT transfers, I suggest that there is at least one more transfer type, i.e. FREquency transfer. This type of transfer entails no superficial changes in the structure of the recipient language because the pattern is already found in both the donor and the recipient language. It forces the recipient language towards adjusting the frequency of the trait to the frequency of the analogical trait in the donor language. This type of transfer seems to be particularly frequent among closely related languages and when it comes to universally preferred patterns.

Corpus frequency should be taken in a broad sense here as encompassing different kinds of frequency-based measurements such as n-gram-based probabilities in terms of Shannon’s surprisal or the overall “offline” informativity of a category as measured in Piantadosi et al. (2011). There are other methods for behavioural profiling of a category in usage-based linguistics (inter alia, Gries & Divjak 2009) and areal typology (cf. Say 2014). Furthermore, statistical research into parallel corpora of the languages of the area remains to be only a desideratum so far despite the fact that a number of parallel corpora relevant for the CB area are available.\(^5\) Thus, areal linguistics in general and the research on the CB area in particular have to integrate methods from usage-based linguistics in order to address challenges imposed by the null hypotheses.

To give an example on how corpus frequency may be applied, I recapitulate the findings from Seržant (2014: 305) on the genitive-under-negation rule in Russian. In a nutshell, Russian allows marking of the direct object under predicate negation by the (partitive) genitive instead of the regular accusative case. Similar property is also found in all Finnic languages with the exception that (a) these languages have a dedicated partitive case here that is distinct from the genitive and (b) this rule is not optional as in Russian but obligatory, i.e. all direct objects must be marked by the partitive case if the verb is negated. It is likely that this rule is subject to areal (Seržant 2015b: 392). Indeed, North Russian dialects that have most intensive contacts with the Finnic population of Russia (in terms of substrate and adstrate) attest a much higher corpus frequency of this rule (ca. 78%) than Standard Russian (ca. 46%):

<table>
<thead>
<tr>
<th></th>
<th>Genitive</th>
<th>Accusative or Nominative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Russian (Ustja region)</td>
<td>92 (78%)</td>
<td>26 (22%)</td>
<td>118</td>
</tr>
<tr>
<td>Spoken Standard Russian</td>
<td>54 (46%)</td>
<td>64 (54%)</td>
<td>118</td>
</tr>
</tbody>
</table>

Table 2: Frequency of the genitive-under-negation rule in Ustja subdialect of North Russian (Ustja corpus, 2013) vs. Spoken Standard Russian (Russian National Corpus) (Seržant 2014: 305)

More generally, dialectal variation, especially in the domain of grammar, is extremely understudied in the CB area. This is despite the fact that substandard varieties generally are more flexible in accommodating language-contact effects.

Another tool is a more fine-grained profiling of traits, cf. “cumulative evidence” of “complex properties” in Koptjevskaja-Tamm & Wälchli (2001: 732), which often reveal idiosyncratic correlations even with typologically frequent patterns. The burden of proof is heavier in such cases since the null hypothesis is always that typologically frequent patterns may emerge spontaneously and need not an external trigger.

To give an example of a more fine-grained profiling of typologically frequent traits, consider dative-like experiencers in the CB area. These are very frequent among those

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languages that have case. However, the eastern Circum-Baltic languages show particular correlations with dative-like experiencer constructions that make the assumption of independent developments in the languages of the area less probable. Thus, Seržant (2015a) argues that dative experiencers show a number of common properties in the area that make them diverge from dative experiencers in other languages. First, a number of predicates involving dative-like experiencers are lexical borrowings from a language of the area. Moreover, none of dative-like experiencers of the area shows the development towards acquiring syntactic subjection — a development dative-like experiencers often undergo elsewhere (e.g. in the textbook example Icelandic, cf. Seržant 2013). Moreover, there are striking correlations in the coding of the dative domain itself that group the languages of the eastern Circum-Baltic area in two groups: languages with the new strategy to encode dative-related meanings that is based on the expression for coding the spatial relation of at-landmark and languages with the old, non-spatial dative.

<table>
<thead>
<tr>
<th></th>
<th>Old DAT strategy</th>
<th>New DAT strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(based on a locative expression)</td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td>dative</td>
<td>adessive</td>
</tr>
<tr>
<td>Finnish</td>
<td>genitive</td>
<td>adessive and allative</td>
</tr>
<tr>
<td>Estonian</td>
<td>–</td>
<td>adessive and allative</td>
</tr>
<tr>
<td>Livonian / North-eastern, Salis dialect</td>
<td>–</td>
<td>dative &lt; adessive and allative</td>
</tr>
<tr>
<td>Livonian / South-western, Curonian dialect</td>
<td>dative &lt; genitive</td>
<td>–</td>
</tr>
<tr>
<td>Latvian</td>
<td>dative</td>
<td>–</td>
</tr>
<tr>
<td>Lithuanian</td>
<td>dative</td>
<td>–</td>
</tr>
</tbody>
</table>

Table 3. Diachronic changes in the encoding of the DAT domain (Seržant 2015a: 328)

Observe that the cut-off point exactly maps these languages into two geographical contiguous areas: (i) languages with the renewed marking of the dative domain by an at-landmark case/adposition are further to the north of the North-Eastern dialect of Livonian and (ii) languages retaining the old strategy to mark datives lie to the South of this dialect. While there is nothing special per se in marking the dative-like meanings via a spatial at-case, it is certainly striking that the same strategy has expanded in a geographically continuous territory. Finally, within the European subcontinent, Polish and Russian as well as Baltic pattern with Finnic languages by having many more deviations from the transitive pattern for various predicates and deviate thus considerably from Standard Average European (Say 2014: 138).

Another methodological aspect that remains to be underestimated is that an areal treatment should not confine itself to contacts between two languages in an area. Thus, many treatments that mean to address the CB sprachbund, actually are focused on language contact between a small subset of the Circum-Baltic languages (for example, many articles in Dahl & Koptjevskaja-Tamm, eds., 2001). By contrast, large-scale research embracing a large part of the languages of the area is still very rare, the synthesis in Koptjevskaja-Tamm & Wälchli (2001) being one of the few exceptions.

### 6 Conclusions

There are a number of common traits — I list 27 common traits of the area in total above (§3) — going far beyond just two or three languages. However, there is a big deal of variation across the languages of the area with respect to such factors as corpus frequency, the degree of grammaticalization, selectional input restrictions, the degree of diachronic persistence of a
contact-induced trait, etc. On the basis of two selected examples (vowel harmony and spatial cases), I have argued that this variation is due to geographic and historical diversification of various hotbeds during the later, historical period. In turn, the earliest common traits emerged from assimilating parts of the Finno-Ugric population – that is, Finnic and Saami people – leaving traces in the Indo-European languages on both sides of the Baltic sea.

Finnic and Saami as well as Low and, later, High German were the donor languages that left traces in all languages of the area. By contrast, other donor languages such as Polish, Russian or Swedish had rather effects that were local, confined to a particular subarea. Moreover, while the Finnic and Saami impact was primarily based on extensive bilingualism and substrate effects, the impact of Low and, later, High German was rather based on cultural and political dominance of the language.

I have argued that areal linguistics should not be viewed as an account to correlations across languages that is complementary to historical linguistics and typology, rather it is orthogonal to these. It should be viewed as a separate discipline in its own rights. Its goal is to explain why linguistic traits cluster in particular areas and are more evenly distributed elsewhere. In contrast to the tradition, I have argued that areal linguistics should extend its focus onto all kinds of geographical trait clusterings, including those potentially genealogically related and those emerging from universal pressures. However, in order to exclude phenomena that are not due to language contact, a more advanced methodology should be used. Thus, I have argued for the integration of methods developed in the usage-based linguistics, including different corpus-frequency measures as well as the heuristics based on parallel corpora.

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