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# 2.6 The Circum-Baltic Area

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Abstract

After a brief historical introduction, this chapter provides an overview of language-contact phenomena in the Circum-Baltic linguistic area with the focus on pattern borrowings and pattern adaptations. It furthermore discusses general conceptual and methodological concerns of areal linguistics, which, it argues, should be viewed as a discipline in its own rights.

Keywords

Circum-Baltic, language contact, pattern borrowing, Slavonic, Baltic, Finnic, Germanic

## 2.6.1 Introduction

19 years have now passed since the seminal publication by Koptjevskaja-Tamm and Wälchli (2001) that considerably advanced the research on the Circum-Baltic (CB) area hitherto.[1]

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Their claims and methodological suggestions still hold. However, the aim of the present contribution is not to recapitulate their findings but to amend them on the basis of the research results achieved since then (cf. 2.6.2), as well as to address conceptual questions (cf. 2.6.3) and issues of methodology (cf. 2.6.4).

The *Circum-Baltic area* – the term was introduced in Dahl and Koptjevskaja-Tamm (1992) – is an established linguistic area with some subareas. It has been extensively discussed in the literature (cf., among others, Matthiassen 1985; Stolz 1991; Klaas 1996; Nau 1996; Dahl and Koptjevskaja-Tamm 2001; Wälchli and Koptjevskaja-Tamm 2001). It comprises the following Indo-European subfamilies: East Slavonic (Russian, North-Western Russian dialects, Belarusian, the West Russian variant of Church Slavonic), West Slavonic (Polish, 'Borderland' 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). Furthermore, it includes most of the languages of the Finnic (Livonian, Estonian, Finnish, Veps, Karelian, Votic, etc.), and the Saami subfamilies of Uralic. Finally, CB also encompasses Karaim which belongs to the Kipchak (Northwestern) subfamily of the Turkic family. This area is, thus, largely dominated by Indo-European. Historically, speakers of Indo-European languages immigrated into this region much later than speakers of Uralic languages.

Jakobson (1931) was probably the first to investigate the areal impact on the distribution of prosodic phenomena, in particular lexical pitch. Lexical pitch continued to played a prominent role in a number of subsequent studies on the area (Haarmann 1976; Lehiste 1978; 1983; 1988; Mathiassen 1985; Stolz 1991; Wiik 1995; 1997; cf. the overview in Koptjevskaja-Tamm and Wälchli 2001: 622-623).

Different authors emphasized different hotbeds within the CB area: (i) the Latvian-Estonian zone (Déscy 1973; Haarmann 1976; Stolz 1991), (ii) the Wikinger sprachbund, including Scandinavian languages, Saami, and Northern Finnic (Déscy 1973), (iii) the Karelian sprachbund (Sarhimaa 1992), and (iv) the Polish-Lithuanian-Belarusian-Ukrainian contact area (Déscy 1973; Wiemer 2003; 2004; Wiemer, Seržant and Erker 2014).

Moreover, larger combinations have also been suggested, for example, an 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 of the eastern coast of the Baltic

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Sea, western CB languages behave very much like Standard Average European languages (Koptjevskaja-Tamm and Wälchli 2001: 732; cf. Haspelmath 2001 on Standard Average European). Still, one can postulate a number of isoglosses for the entire area as long as we do not expect them to exactly match. For example, one may consider the emergence of spatial expressions that are morphologically realized as fusional postfixes to be partially due to contact influences across the entire area despite their variation in the degree of productivity and fusion (see below §2.6.3). Another example is lexical borrowings from Low and High German. These can be found in all languages of the area, even though not the same lexical items across all languages.

## 2.6.2 Historical background

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

North Germanic tribes entered the eastern coast of the Baltic sea – including the territory of 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 *Vents-pils*, German *Windau*), *l[i]flant* 'Livonia' (cf. German *Livland*), and *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-reaching contacts. The expansion of Christianity in the area started by the end of this period and reached its peak at different times in different parts. For example, the initial success of the Orthodox missionaries (possibly from Novgorod) in the eastern part of the area was later undone by the Crusaders, primarily 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 Slavonic, Old Russian *božьnica/bozьnica* 'church' (Sreznevskij I.143; Seržant 2006).

After a short period of Denmark's 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 Livonian (Teutonic) Order in Livonia, which largely covered present-day Estonia (including the Tallinn region, the islands Saaremaa and Läänemaa which were formerly Danish) and Latvia.

The language of merchants was not only Low German but also various subdialects of High German, as is in evidence from contracts and documents from the area. These were often composed in the subdialect of the scribe. Features of Low and High German dialects occurring in the same document were not uncommon. Gradually, Low German was entirely replaced by High German dialects.

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 the 16th century when Sweden became the dominant power in the Baltic region, while Poland controlled the East Slavonic, Latgalian and Lithuanian territories of the former Grand Duchy of Lithuania. Since after the Nordic War (1700-1721), Russian increasingly rose to the dominant language in the eastern part of the area (achieving its peak in the 19th c.) until the fall of the Soviet Union in 1991.

To summarize, the CB area has never been politically unified under one dominant language. Instead, different languages of the region, including Danish, Swedish, Old West Russian[2] and Russian, dominated a particular subpart of the area (Koptjevskaja-Tamm and 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 CB area during the prosperity of the Hanseatic League.

### 2.6.3 Selected phenomena

There is a large body of literature about particular contact phenomena between individual languages of the area (cf. the list at the end of this section). Linguistic contact situations typically involve two languages at once, while larger, areal effects are due to the multiplication of bilateral contact situations. This is probably the reason why only few studies

[2] The Old West Russian chancery language of the Grand Duchy of Lithuania, although highly dominated by Old Church Slavonic, may nevertheless be considered a local variant (cf. Stang 1935).

since Koptjevskaja-Tamm and Wälchli (2001) have concentrated on recurrent phenomena in more than two languages. In what follows, I discuss two phenomena of the area in which different contact situations give rise to larger areal correlations: vowel harmony and spatial cases. Following this discussion, there will be a list of the most uncontroversial isoglosses of the area at the end of this section.

Finnic languages typically have vowel harmony. The only exceptions are Livonian and Estonian with the exception of the South Estonian Võru dialect (Stolz 1991: 38-39; Koptjevskaja-Tamm and Wälchli 2001: 628) as well the Finnish dialect of Gällivare in northern Sweden (Wande 1982: 52). The stressed vowel 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, in a subtype of *jakan'e* (change of the unstressed ['e]), the unstressed *-e-* is realized either as ['a], ['i] or ['e], depending on the quality of the vowel in the stressed syllable. For example, /*s'**e**strá*/ > dial (Pskov region) *s'**a**strá* 'sister' as opposed to the lack of the change in dial (Pskov region) *v'**e**l'ík'im* 'great.INS.SG' (Standard Russian also /*v'el'ik'im*/) due to the absence in the former and presence in the latter of a front vowel in the stressed syllable (Careva 1962: 61-3; Seržant 2010: 199).

The Baltic languages, in parallel to the East Slavonic dialects, also 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 Proto-Latvian into later dialects, the pre-stage of East-Latvian, i.e. Proto-Latgalian, underwent another set of three harmony-conditioned changes, e.g. Proto-Latvian ***e****...a/u* > ***ɛ*** *...a/u* > Latgalian ***a****...a/u*, but Proto-Latvian ***e****...i/e* > Latgalian ***(i)e****...i/e*, and Proto-Latvian ***i****...a/u* > Latgalian ***y****...a/u*, but no change in the environment of a front stressed vowel with Proto-Latvian ***i****...e/i* remaining unchanged in Latgalian (Seržant 2005). Moreover, South-East Lithuanian dialects underwent similar changes on a harmonic basis: Common Lithuanian *m**e**dùs* > South-East Lithuanian *m**a**dùs* 'honey' (cf. Latgalian *mads* < Proto-Latvian *medus* 'honey'), but South-East Lithuanian *m**e**rgiot'a* 'girl' (~ Lithuanian *m**e**rgiotė*).

Except for Latvian and Latgalian, the stressed syllable determines the harmony in Finnic, West Russian and Lithuanian. However, since the harmonic changes of Proto-Latgalian and Proto-Latvian are demonstrably old phenomena (Seržant 2005), they are likely to have predated the loss of the original, mobile stress patterns in Proto-Latgalian. It is thus likely that the harmony-driven changes of Proto-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 Slavonic, and Baltic. Finnic must have influenced the latter two which attest harmonic alternations only in very specific phonological environments somewhat disguised by later morphological levellings. In a second wave, a number of harmonic systems disappeared in the area of most intensive contacts with German, Russian or Scandinavian. Estonian (but not South Estonian) and Livonian gave up vowel harmony entirely. Likewise, the Finnish dialect of Gällivare in northern Sweden has entirely lost vowel harmony (Wande 1982: 52). Similarly, Latgalian and East Slavonic remodelled harmonic alternations by levelling, thus almost entirely removing previously harmonic patterns, leaving behind only traces thereof (Nau 2011: 15-16).[3]

I now turn to the expressions of spatial relations via highly fusional postfixes. The case system, in particular the system of spatial cases may be considered subject to areal influence (Balode and Holvoet 2001: 44). Finnic languages, as is wellknown, have a set of spatial cases, such as ellative, inessive, illative, adessive and allative, derived from more basic cases via case stacking. Analogically, Baltic languages have grammaticalized the following new spatial cases via case stacking: The illative case is derived from the accusative by way of adding the postposition *-*na* (cf. Old Lithuanian *dang-u-n* 'into the sky'). The allative case stems from the genitive with the postposition *-p(r)i* (cf. Old Lithuanian *diev-o-p(i)* 'to God'). The inessive case is the locative with the postposition *-*ēn* (cf. Old Lithuanian *dangu-j-e* 'in the sky'). The adessive case derives from the locative with the postposition *-p(r)i* (cf. Old Lithuanian *diev-ie-p(i)* 'at God') (Kazlauskas 1968: 153; Stang 1966: 228; Seržant 2004a; 2004b; 2004c).

Koptjevskaja-Tamm and Wälchli (2001: 672) argue that the areal impact of Finnic on Baltic is problematic here for the following reasons: (i) New grammaticalized spatial cases also occur elsewhere in Indo-European, e.g. Umbrian, Tokharian and Ossetic, and may, therefore, be historically accidental in Baltic. (ii) There is only a partial functional overlap between the spatial cases in Baltic and Finnic. E.g., body-part locations as targets of dressing are coded with *in*-cases in Finnic, but with the *on*-preposition in Lithuanian. Another example is the verb 'to stay' which requires the illative in Finnic, but the inessive in Baltic. (iii) This functional "incompatibility of the Finnic and Baltic local case systems" was removed only in Latvian and Livonian. However, they are overly pessimistic.

[3] For example, Latgalian *cyts* 'another one' has generalized *-y-* also in those cases in which it was originally absent, e.g. Proto-Latvian *cit-i* > Latgalian *cyt-i* 'another.NOM.PL' in analogy to Latgalian *cyt-am* 'another.DAT.SG'.

First, with reference to (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 that spatial cases in Baltic are essentially the result of language contact.

Second, with reference to (ii), it is true that Finnic languages have extended the original spatial meanings to cover more spatial and non-spatial contexts. By contrast, the Baltic languages, primarily Old Lithuanian and dialectal Lithuanian, mostly attest only actual spatial meanings with these cases. That is, the adessive denotes the meaning of *at* a place; the inessive denotes the meaning *in* a place, etc. Moreover, the adessive case in Finnic acquired the meaning of *on* a place, a development that the Baltic adessive did not undergo. However, there are also common developments here. Thus, the allative case and the adessive case of Finnic may be used *pro dative,* e.g., in order to mark the recipient role. Old Lithuanian also attests non-spatial meanings of the spatial cases, albeit, indeed, very rarely. For example, the Old Lithuanian allative case may also mark the recipient, a 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). Another example of a parallel development is the use of the illative with the verb 'to stay'. Similarly to Finnic languages, some northern Lithuanian dialects, and already Old Latvian, do allow the illative case to be used with stationary verbs including 'to stay' since both the inessive and the illative merged functionally (in northern Lithuanian dialects) and morphologically (in Latvian).

Crucially, contact-induced grammaticalization rarely proceeds to exactly the same degree in the target language as it does in the donor language. Indeed, the functional differences between the Baltic and Finnic systems are due to different degrees of grammaticalization. In this respect, Koptjevskaja-Tamm and 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 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 and Wälchli 2012: 37). In this sense, the different degrees of semantic extension are expected and do not represent counterevidence to the claim that the spatial cases of Proto-Baltic are due to a strong Finnic influence. These morphological correlations are quite unique in the larger,

European context[4] and certainly overweight the variation in functional extensions discussed above.

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 postpositional clitics 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 agglutinative inflectional-case forms morphologically, cf. Swedish *därunder-i-från* (lit. under-in-from ) 'from below', *var-i-från* (lit. where-in-from ) 'from where', *väst-i-från* (lit. west-in-from ) 'from the west'. The following table presents Norwegian Bokmål because it better illustrates that the ablative postposition was added onto the inessive form (case stacking):[5]

Table 1 Norwegian illative, inessive and elative "cases" with some spatial words

| | basic/illative | inessive | elative |
|---|---|---|---|
| *hem* 'home' | *hjem-ø* '(to) home' | *hjemm-e* 'home' | *hjemm-e-fra* 'from home' |
| *ned* 'down, below' | *ned-ø* 'down' | *ned-e* 'below' | *ned-e-fra* 'from below' |
| *nord, vest* 'north', 'west' | – | – | *nord-fra, vest-fra* 'from the North, West' |
| *der* 'there' | *der-ø* '(to) there' | arch *der-i* 'there' | *der-(i)-fra* 'from there' |

Observe case stacking in the elative "case" – a morphological property that is found with spatial cases in all languages of the area (Russian resembles it with the combination of case and preposition).

What is more, the adposition used for the elative (Swedish *från,* Norwegian *fra* 'from'), and the one used for the inessive (Swedish *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

[4] Basque or Turkish are geographically remote exceptions.
[5] In Swedish, the "inessive" vowel is disguised by later sound changes cf. *hemm-**a*** 'home' but *hemm-**i**-från* 'from home'. Furthermore, note that "spatial cases" are also extant in Danish. Danish is certainly more remotely related to the area. However, it also has other features typical of the area, such as the suprasegmental glottal stop (*stød*).

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 generally tend to develop a more efficient and concise system of encoding spatial orientation (cf. Creissel and Mounole 2011). It thus does not come as a surprise that there are spatial "cases" in Scandinavian with words denoting spatial relations only. Moreover, although structurally similar expressions exist in Icelandic with the older elative *-an*, it is only Scandinavian that has renewed this marker by creating a new postpositional clitic *-fra/-från*. Combinations reminiscent of these are also marginally attested in other languages, such as German. Here, the anaphoric and deictic *dar-* and *hin/her* may also host enclitic postpositions: *dar-in* (lit. 'this-in') 'in this / here' vs. *dar-aus* (lit. 'this-from') 'from this / there'. However, crucially, these are considerably less productive in German than in Scandinavian in terms of type frequency since they do not occur with nouns, but with the two particles *dar-* and *hin/her* only. The functional continuity as well as higher type-frequency of such expressions in Scandinavian as opposed to other Germanic languages may be evidence for Saami and Finnish influence in the domain of spatial expressions of these languages.

Finally, new spatial cases have partially emerged also in Russian as opposed to all other Slavonic varieties as has been illustrated in Breu (1994). While prepositions, such as *na* 'on' and *o* 'about' both take the old locative, i.e. the prepositional case in other East Slavonic languages, Russian has secondarily introduced a formal difference between the spatial meaning (*on*) and the non-spatial one (*about*) with certain nouns:

(1) Russian (Breu 1994: 51)

| | | |
|---|---|---|
| *na most-u* | vs. | **na most-e* |
| on bridge-U_LOC | vs. | *on bridge-E_LOC |
| 'on the bridge' | | |

(2) Russian (Breu 1994: 51)

| | | | | |
|---|---|---|---|---|
| **o* | *most-u* | vs. | *o* | *most-e* |
| *about bridge-U_LOC | | vs. | about | bridge-E_LOC |
| 'about the bridge' | | | | |

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, in Russian only, following the demise of the *u*-declension the old locative ending *-u* was reinterpreted exclusively to mark spatial relations. In turn, the ending *-e* occurs with any kind of prepositions governing the locative case, including non-spatial prepositions, such as *o* 'about'. By contrast, in the other East Slavonic languages, namely, Ukrainian, Belarusian, as well as in West and South Slavonic, this ending has either disappeared altogether (e.g. Bulgarian) or remained as an allomorph – albeit under varying conditions –, for example in Polish and 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.

At this point an important observation about the mechanisms of dispersion in the early CB can be made: The emergence of spatial expressions morphologically realized via case stacking crucially involving postfixes took place at different hotbeds (Scandinavia, Northwest Russia, West Latvia and West Lithuania) and most probably through independent historical processes, but, crucially, triggered by the same substrate (Finnic and possibly Saami).

Much later, in a second wave, the system of spatial cases decreased 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 in 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 *a necklace around the neck* but not *a snake around the neck*, and *a hat on the head* but not *a bird on the head* (for the non-conventional combinations prepositions have to be used). While Koptjevskaja-Tamm and Wälchli (2001: 672) take this as evidence against areal influence in the Baltic spatial cases, this is demonstrably a much later development independent of the rise of the spatial cases. This second wave did not only affect Latvian, but also North Lithuanian dialects as well as Livonian (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 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, for example with the Estonian postposition *peal* 'on' taking the genitive instead of the adessive case. Moreover, Old Latvian, German-influenced writings as well as some Low Latvian dialects also employ the postposition *iekšan/iekšā* 'inside' with the genitive case on the noun instead of the inessive (traditionally locative) case.

To summarize, there is good evidence to assume that the development of spatial cases has been subject to strong language contact in the whole area. Finnic and Saami were the donor languages, albeit they exercised their impact on the neighbouring languages to varying degree. We observe that different processes in different languages affected the encoding of spatial relations by means of case: Russian has recycled the former locative ending of the *u*-declension. East Baltic has encliticized former postpositions for the *at*- and *in*-cases[6] while Scandinavian has encliticized the adpositions *from* and *in* with some few words. It is probable that different Finnic and/or Saami areas provided the input here. In a second wave, however, Swedish and German must have played the main role in propagating the adpositional phrases that gradually replaced the former spatial cases. The chronology of these changes is noteworthy because it is recurrent in the area, and it leads to the following key claim: The earlier layer of changes is often due to contacts with the autochthonous 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, and Russian. Contact-induced changes relating 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 *sprachbund* (2.6.4), and to the corresponding methodological issues (2.6.5), I list the most uncontroversial isoglosses of the area:[7]

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

(ii) **Vowel harmony** and related phenomena: South Estonian Võru, some sound changes based on harmony in Latgalian, Proto-Latvian, North-East Lithuanian, West Russian

[6] These are the addessive and allative, as well as the inessive and illative cases.
[7] Note that the features (i) – (xxvii) are not exclusive to the languages of the area since many CB languages maintain genealogical and areal relations to languages outside of it as well.

and Belarusian (Stolz 1991: 38-39; Koptjevskaja-Tamm and Wälchli 2001: 628; Seržant 2010: 199, 206; Wiemer, Seržant and Erker 2014; see above in this section).

(iii) **Tonemic distinctions**: Scandinavian, Latvian, Lithuanian, Low German dialects (Lehiste 1978, 1983; Koptjevskaja-Tamm and Wälchli 2001: 640-646; Daugavet 2015).

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

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

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

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

(viii) **Partitive (genitive) case on numerals**: Latgalian, Lithuanian, Finnic, East Slavic, Polish (Koptjevskaja-Tamm and Wälchli 2001:698-704; Koptjevskaja-Tamm 2001).

(ix) **Nominative objects**: Latvian, Latgalian, Lithuanian, various Russian dialects of the region, all Finnic languages (Timberlake 1974; Holvoet 1993; Ambrazas 2001; Koptjevskaja-Tamm and 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 and Wälchli 2001:671-673; see above in this section).

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

(xii) **Differential case-marking of nominal predicates**: Latvian, Latgalian, Lithuanian, Russian, North Russian, all Finnic languages (Koptjevskaja-Tamm and 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 and Wälchli 2001:676-679; Seržant 2015a; Mazzitelli 2017).

(xiv) Idiosyncratic correlations in **dative-like experiencer constructions**: Old Scandinavian, all Finnic languages, German, Latvian, Lithuanian, Russian (Seržant 2015a).

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

(xvi) **Slavic-style aspectual system**: Yiddish, Romani, Lithuanian (Pakerys and Wiemer 2007; Wiemer 2009; Kožanov 2011; Arkadiev 2014; Šišigin 2014; Arkadiev 2018).

(xvii) **Zero-subject, "active" impersonals**: Baltic, Finnic, East Slavic, Polish (Holvoet 2001; Koptjevskaja-Tamm and Wälchli 2001:685-686).

(xviii) **Impersonals with passive-like morphology and properties of an active-like syntax**: Latvian, Livonian, Votic, Estonian, Finnish, North Russian, Polish (Christen 1998; Koptjevskaja-Tamm and Wälchli 2001:686-690; Holvoet 2001; Danylenko 2005; Wiemer and Giger 2005; de Smit 2006; Seržant 2012; Drinka 2017).

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

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

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

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

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

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

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

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

(xxvii) **Evidential mood**: Latvian, Lithuanian, Estonian (Haarmann 1976; Koptjevskaja-Tamm and Wälchli 2001: 715-723).

### 2.6.4 The concept of a *sprachbund*

The Russian term *jazykovoj sojuz*, later translated into German as *sprachbund*, was 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, Kaufman and Smith-Stark 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 and 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 is sometimes taken to refer to a hierarchically organized 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 motivated by various local effects of mutual influence with different epicentres and historically layered contact effects (Nau 1996). Accordingly, Koptjevskaja-Tamm and Wälchli (2001: 626-7, 728) and Koptjevskaja-Tamm (2002) refer to the CB area as a *Contact Superposition Zone* and contrast it with the traditional sprachbund. However, CB is not atypical in this respect. Multilateral dispersion of traits is also typical for other areas such as the textbook example of the Balkan sprachbund (cf. Thomason and Kaufman 1988: 95). From this, it follows that not the CB area is atypical but sprachbunds with just one epicentre are. Therefore, it seems that taking the notion of sprachbund to refer to a situation in which a group of languages undergo changes radiating from one epicentre is ill-advised because such situations are too special and rare. By contrast, the default is a contact superposition zone.

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 across different languages of the area. In a bilingual setting, speakers employ different strategies in order to enhance shifting between languages, for example, by switching only between the vocabulary of the two languages but not their 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, much less is known about different combinations of local

bilingualisms. Politically and culturally dominant languages certainly do considerably contribute to convergence effects but local bilingualism situations demonstrably have a much stronger effect.[8]

Bilingualism does not require the existence of a socially, culturally and/or politically dominant language for transfer to take place. In contrast to linguistic dispersion from a dominant language, local bilingualism cannot affect an area at once because speakers typically master only two or, rarely, three languages of the area. Consequently, the dispersion of a linguistic trait beyond these languages is mediated, layered and less exact. 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, as has been repeatedly argued in the literature (Nau 1996; Koptjevskaja-Tamm and Wälchli 2001). Recall the observation above (2.6.3) that the earlier layer of contact phenomena in the CB area is primarily based on independent processes of pattern borrowing from (and into) Finnic and Saami languages in different hotbeds. It is essential for an understanding of the CB area that nearly all its languages assimilated parts of the Finnic and/or Saami population: Scandinavian, Latvian, Lithuanian as well as Northwest Russian.

Furthermore, the traditional concept of sprachbund requires another type of revision. This concerns the question of what type of correlations constitutes a sprachbund. Since sprachbunds were invoked by Trubetzkoy to account for the correlations that are not due to common inheritance in mutually related languages, a sprachbund 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 and Koptjevskaja-Tamm, eds., (2001) elucidate language-contact phenomena between two languages that are entirely unrelated, such as Latvian and Livonian or Estonian, or only remotely related. However, the requirement for the 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 branches of the area are related: the Slavic, Baltic and Germanic subfamilies exhibit in general more genealogical correlations among each other than with other Indo-European subfamilies. The same applies to the Finnic subfamily of Uralic.

[8] Under *local bilingualism* I conceive a bilingual situation in which the L1 speakers of the languages involved inhabit roughly the same territory.

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 may entirely unrelated languages develop homogeneity as a result of language contact but also the retention of a high degree of homogeneity between closely related languages need not be an unmotivated process. Contact-induced inheritance is a phenomenon sui generis that is different from drift inheritance, i.e. unmotivated retention of features, and from inheritance of universally preferred patterns due to universal pressures.[9] In this respect, areal linguistics comes close to dialectology, more specifically, to dialect geography. For example, Russian dialects must allow not only 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 that maintains homogeneity of closely related languages. A jointly 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 it is for a pattern to replicate, the more difficult it is for the researcher to argue for a borrowing event and, vice versa. Note that dispersion of linguistic traits is certainly easier across languages with a higher degree of homogeneity (due to inheritance) than across structurally very diverse languages. For example, Low German certainly had a much higher impact on the Scandinavian languages than it had on Baltic or Finnic. Thus, not only words but also the wholesale system of prefixes (*an-, be-, för-/for-, und-, miss-*, etc.) and a number of suffixes, such as *-agtig, -bar, -er, -eri, -erske, -he(i)t-* or *-else*, were borrowed from (Low) German into the Scandinavian languages (Eliasson 2017: 2100). High structural and lexical similarity of (Low) German with Scandinavian languages must have considerably enhanced borrowing here.

[9] Note that contact-induced inheritance does not require the languages to be genealogically related. Languages in contact may happen to inherit similar patterns and then retain them more faithfully as a result of mutual influence, cf. the partitive case in Finnic languages, and the partitive genitive case in Baltic and Russian, especially North Russian (Seržant 2015b).

Finally, another factor that brings about convergence effects, and that is traditionally considered complementary to genealogical and areal correlations is universal pressures (*universals* in Greenberg 1966). Certain patterns are simply generally preferred in languages, such as, for example, subject-before-object word order as opposed to the reverse combination. Traditionally, an accumulation of such features in an area is considered trivial and, thus, not subject of areal influence (Dahl 2001: 1457). However, I suggest that even these traits have to be taken into account when describing an area. First, universals are only probabilistic tendencies that may be violated. For example, the basic word order in the CB area is homogenously subject-before-object. 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. the subject occurs after the object (cf. Campbell et al. 1986: 547). There is, thus, a difference between the CB and the Mesoamerican area. The former does not allow object-before-subject as the basic order while the latter does. Moreover, universally preferred patterns are certainly easier to borrow than typological quirks. Universal pressures create patterns that are particularly efficient in language processing and production. They are, therefore, easier to accommodate in a recipient language and thus a transfer event is more likely with this type of traits than with typological quirks. Since areal linguistics in general, and the research on sprachbunds in particular, primarily focus on transfer phenomena, it is an important question to ask how universally preferred patterns may be copied, and how they expand across an area.

Secondly, universal linguistic traits exist only on the level of coarse-grained cross-linguistic comparison that is the methodological standard in linguistic typology for good reasons. However, this is not the standard in areal linguistics, which takes many more details into account. At a certain degree of granularity, there will be no universal traits anymore becauseuniversally preferred patterns may vary considerably with respect to their type frequency, selectional input restrictions, etc., across languages. Thus, we can say that subject-before-object is universally preferred but we cannot say that the particular frequency of this pattern, say 72,1%, is universally preferred. An illuminating example is the basic transitive construction – something that presumably all languages have and whose existence is thus universally preferred. However, languages of the world show considerable areal effects in the degree of expansion of the basic transitive pattern into 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 more closely knit unit and score even lower in this respect than Standard Average European (Say 2014: 138; see also Seržant 2015a). Finally, different kinds of methods of profiling a category in usage-based linguistics (cf., among others, Gries and Divjak 2009), and in areal typology (cf. Say 2014) may elucidate areal diffusion of universally preferred patterns.

To summarize the discussion above, the following definition of a sprachbund (or 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 the 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, contact-induced inheritance of linguistic traits and the expansion of universally preferred patterns in an area may also be due to language contact, especially if their particular properties accumulate in the area. Methodologically, areally-induced inheritance and areally-induced expansion of universally-preferred patterns represent a challenge for the researcher because the null hypothesis is, of course, that there are no areal effects in these cases. Nevertheless, research should not exclude such cases only because they are methodologically challenging.

### 2.6.5 Methodological issues

I have argued in the previous section that areal linguistics should study clusters of linguistic traits in a geographic area independently from the point of view of historical-comparative linguistics and typology. That is, it should operate 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, and with sociological and political constellations. Consequently, the definition in (3) removes a number of limitations found in the existing literature on what a description of a linguistic area may include, such as the clustering of inherited traits in a particular area, and universal tendencies.

Having said this, 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, whereas any areal effect conserving shared traits has to be convincingly shown. The same applies to universally preferred patterns. By contrast, if a trait frequently found in the area is typologically rare no additional evidence is needed to claim an areal impact. For example, adjectival case agreement (cf. section 2.6.3) is typologically rare across world's languages. Thus, the case agreement on adjectives in the Finnic languages, in contrast to other Uralic languages (Koptjevskaja-Tamm and Wälchli 2001: 692-693), is sufficient evidence to claim an impact from the Indo-European languages of the area. By contrast, if correlations are found with universally preferred patterns, then, again, the null hypothesis is that this is exclusively due to universal pressure. To disprove the null hypothesis, one needs to argue convincingly for an areal effect. In other words, a more granular approach is necessary in the study of correlations that may alternatively be explained with reference to universal pressure or drift inheritance (as opposed to contact-induced inheritance and inheritance of universally preferred patterns). This approach can rely on tools, such as corpus frequency and more fine-grained profiling of traits. Corpus frequency – both type and token frequency – has not yet been applied to the CB area.

The distinction between 'MAT(erial)' and 'PAT(tern) transfers' in Sakel (2007), and Matras and Sakel (2007) highlights an important aspect: Grammatical domains are typically affected by PAT transfers (in the CB area). In other words, we observe different kinds of historical processes towards unification of the functional and structural aspects of grammar in the CB area with almost no concomitant MAT borrowing of grammatical items. While traditional research on linguistic areas in general, and on language contact in particular, concentrates on these two types of transfer, i.e. PAT and MAT transfers, there is at least one more transfer type, namely, *FREquency* transfer. This type of transfer entails no superficial changes in the structure of the recipient language because the pattern is already existent in both the donor and the recipient languages. 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, but also with universally preferred patterns.

Corpus frequency should be understood in a broad sense as encompassing different kinds of frequency-based measurements such as *n*-gram-based probabilities (e.g. 'Shannon's surprisal' or the overall 'offline informativity' Piantadosi, Tily and Gibson 2011). There are other methods for the behavioural profiling of a category in usage-based linguistics (cf., e.g.,

Gries and Divjak 2009), and in areal typology (cf. Say 2014). Furthermore, statistical research into parallel corpora of the languages of the CB area remains a desideratum despite the fact that a number of relevant parallel corpora are available.[10] 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 the challenges posed by the null hypotheses.

To give an example on how corpus frequency may be applied, I recapitulate the findings in Seržant (2014: 305) on the genitive-under-negation rule in Russian. In short, Russian allows for the direct object under predicate negation to be in the (partitive) genitive instead of the regular accusative case. A similar property is also found in all Finnic languages with the exception (a) that these languages have a dedicated partitive case that is distinct from the genitive, and (b) that this rule is not optional as in Russian but obligatory. That is, all direct objects must be in the partitive case if the verb is negated. It is likely that this rule is subject to areal effects. Indeed, the 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 than Standard Russian (Pearson's chi-square $p < 0{,}001$):

Table 2.6.2 Frequency of the-genitive-under-negation rule in the Ustja subdialect of North Russian (Ustja corpus 2013) vs. Spoken Standard Russian (Russian National Corpus) (Seržant 2014: 305)

| | Genitive | Accusative or Nominative | Total, sentences with negated predicate |
|---|---|---|---|
| North Russian (Ustja region) | 92 (78%) | 26 (22%) | 118 |
| Spoken Standard Russian | 54 (46%) | 64 (54%) | 118 |

More generally, dialectal variation in the CB area, especially in the domain of grammar, is extremely understudied. 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 and Wälchli 2001: 732), which often reveal idiosyncratic correlations even with typologically frequent patterns. The burden of proof is

[10] Russian, Polish and Belarusian in *ParaSol: A Parallel Corpus of Slavic and other languages* (http://parasolcorpus.org, last accessed 9 Sept. 2020); Russian, Belarusian, Polish, Swedish, and Latvian in the Parallel Subcorpus of the Russian National Corpus (http://www.ruscorpora.ru/search-para-en.html, last accessed 9 Sept. 2020).

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 languages that have more elaborate flagging systems (e.g. prepositions or case). However, the eastern CB 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. For example, the following adverb-like predicates taking a dative or dative-like experiencer are material borrowings: Latvian *žēl* 'pity', and the Finnish *sääli* 'pity' are old borrowings from Old Russian **žālĭ* (Modern Russian *žal'*). Moreover, none of the dative-like experiencers of the area show the development towards acquiring syntactic subjecthood – a development that dative-like experiencers often undergo elsewhere (cf. Seržant 2013).

Moreover, there are striking correlations in the coding of the dative domain itself that divide the languages of the eastern CB area into two geographic groups. These are languages with the new strategy of encoding dative-related meanings based on the expression of the spatial relation in the form of '*at* a place' (allative, adessive), and languages with the old, non-spatial dative.

Table 2.6.3 Diachronic changes in the encoding of the DAT domain (Seržant 2015a: 328)

| | Old DAT strategy | New DAT strategy (based on a locative expression) |
|---|---|---|
| Russian | *dative* | *adessive PP* |
| Finnish | *genitive* | *adessive and allative* |
| Estonian | –[11] | *adessive and allative* |
| Livonian / NE Salis dialect | –[12] | *dative* < *adessive and allative* |
| Livonian / SW Curonian dialect | *dative* < *genitive*[13] | – |
| Latvian | *dative* | – |

[11] The original strategy to encode typical dative-like meanings (e.g. the recipient) in Finnic was to use the genitive case. This option is no longer available in Estonian and NE Livonian.
[12] Cf. footnote 8.
[13] Originally the genitive, it is often referred to as *dative* in grammatical descriptions.

| | | |
|---|---|---|
| Lithuanian | *dative* | – |

Observe that the cut-off point exactly maps these languages into two geographically contiguous areas. (i) The languages with the renewed marking of the dative domain by way of a case form expressing '*at* a place' or an adposition are further to the north of the northeastern dialect of Livonian. (ii) The 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 into a geographically continuous territory. Finally, within the European subcontinent, Polish and Russian, as well as Baltic tally with Finnic by having many more deviations from the transitive pattern for various predicates and, thus, deviate considerably from Standard Average European (Say 2014: 138).

Another underestimated issue in methodology is that an areal treatment should not confine itself to contacts between two languages in an area. Many studies that mean to address the CB sprachbund actually focus on contacts between a small subset of the CB languages (cf., e.g., various articles in Dahl and Koptjevskaja-Tamm 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 and Wälchli (2001) is one of the few exceptions.

### 2.6.6 Conclusions

There are a number of common traits – I list 27 common traits of the CB area in total above (cf. 2.6.3) – that go beyond just a pair of languages. However, there is considerable variation across the languages of the CB area with respect to 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 later geographic and historical diversification of various hotbeds in the later, historical period. In turn, the earliest common traits emerged from assimilating parts of the Uralic 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, and Swedish had effects that were rather local and confined to a particular subarea. Moreover, while the Finnic and Saami impact was primarily due to 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 of correlations between languages that is complementary to inheritance-based and universal typological accounts. Rather, areal linguistics is orthogonal to these. It should be viewed as a separate discipline in its own right. Its goal is to explain why linguistic traits cluster in particular areas, and why they are more evenly distributed elsewhere. In contrast to the tradition, I have argued that areal linguistics should extend its focus to all kinds of geographical clusters of linguistic traits, including those that are potentially ascribable to genealogical relations and universal pressure. However, in order to exclude phenomena that are not due to language contact, a more advanced methodology is necessary. Thus, I have argued for the integration of methods developed in usage-based linguistics, including different corpus-frequency measures, as well as heuristics based on parallel corpora.

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