The contribution of Germanic to the expansion of partitive-related phenomena in the prehistoric Circum-Baltic area*

Abstract

The primary objective of this article is to expand the discussion on partitive-related phenomena diffusion in the prehistoric Circum-Baltic area by considering the role of early Germanic languages. The central message is that early Germanic languages have been historically overlooked in the study of partitive phenomena in the Circum-Baltic area, and this paper aims to address this oversight. After briefly discussing the main hypotheses related to the development and spread of partitive functions, the focus will shift to two understudied phenomena in early Germanic languages, namely the "genitive of quantification" and the "genitive of negation". It will be shown that these two phenomena were present in early Germanic languages, suggesting that these should be included in further studies concerned with contact in the prehistoric Circum-Baltic area.

Keywords: Morphosyntactic contact, prehistoric Circum-Baltic area, Germanic, partitive, genitive of quantification, genitive of negation

1   Introduction[1]

The Circum-Baltic area (CBA) is a geographical entity whose linguistic interactions have long been the subject of study, reaching a moment of major recognition with the seminal two-volume collection of studies edited by Dahl & Koptjevskaja-Tamm (2001). One of the most discussed topics for the areal linguistics of the CBA concerns the development and

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[1] Abbreviations: CB = Circum-Baltic, EG = early Germanic, Fin. = Finnish, GenNeg = genitive of negation, GenQuant = genitive of quantification, Goth. = Gothic, OE = Old English, OHG = Old High German, OLG = Old Low German, ONI = Old Norse-Icelandic, PB = Proto-Baltic, PBSl = Proto-Balto-Slavic, PG = Proto-Germanic.

diffusion of the partitive case and related morphosyntactic phenomena, with a special focus on the questions surrounding the donor language group (among others, Larsson 1983, 2001; Koptjevskaja-Tamm 2001; Bjarnadottir & de Smit 2013; Seržant 2015; Luraghi *et al.* 2020). In the case of two specific phenomena, the "genitive of quantification" and the "genitive of negation", most of the literature seems to agree that we are either dealing with a Baltic calque in Finnic or with a common areal development based on preexisting elements within the single languages (s. Section 3 below).

Due to the late attestation of the languages from this area, comparative work is mostly based on contemporary stages of Balto-Slavic and Finnic, often with the aid of language internal developments and typological patterns. This method, though established, presents one major issue, namely the exclusion of branches which, in their modern attestation, lack the phenomena that are the object of discussion. The early Germanic (EG) languages, in particular, have been mostly excluded from the discussion, despite the fact that i) the prehistoric stage of these languages was indeed present in the Baltic area, and it has remained there ever since the 2nd millennium BCE, and that (as it will be shown below) ii) the use of the partitive (expressed by the genitive in EG) presents significant overlap with the partitive in Balto-Slavic and Finnic.

After "setting the scene" and contextualizing the presence of Germanic and its contact with the neighboring languages (and, in particular, Finnic) via archeological attestation and loanwords, the attention will shift to the two partitive phenomena mentioned above, namely the "genitive of quantification" and the "genitive of negation" in EG languages, and present data showing both similarities and differences in comparison with the other languages of that area. Finally, I will argue that there are no cogent reasons not to include EG languages in further research concerning the diffusion of these partitive-related phenomena in the prehistoric Baltic area.

2 The prehistoric Circum-Baltic area
2.1 Germanic archeological expansion

The geographical core of (what would later become) Germanic is traditionally associated with the Nordic Bronze Age culture (1750 – 600 BCE, Polomé 1987; Schmidt 1991; Parpola 2012). This culture covers a vast archeological area with one main cultural center (Lang 2007: 46). This cultural center, attested from the Early Bronze Age period, extended from southern Scandinavia to the Jutland peninsula and the Schleswig-Holstein region, with its periphery in the Mälaren lake area and on the western and south-western coast of Finland; in the southern Scandinavia area, in particular, there are considerable traces of a complex society

with economical and cultural ties with Central Europe and the Mediterranean. A second cultural center (corresponding to the West Baltic Barrow culture area and developed somewhat later on the western coasts of modern Lithuania) presented traces of "a rather complex chiefdom society, the leaders of which had contacts with southern Scandinavia and central Europe" (Lang 2007: 46). The ties with this second cultural center, as well as the discovery of later traces on the shores of Finland and Estonia, in particular on the island of Saarema (Parpola 2012: 132, and literature cited therein) suggest that the nautical technology was sufficiently advanced for an eastward expansion (cf. also Sperling 2016: 400-1). To further substantiate these claims, it should be noted that Germanic neck-rings with alternate ridged end-plates have been shipped from Scandinavia and found in many *tarand*-graves around the Baltic (with the exclusion of Latvia and Lithuania, s. Lang 2007: 212). This east-ward commercial expansion possibly allowed for contact with Finnic-speaking populations, whose geographical core is suggested to be on the south of the Gulf of Finland (Saarikivi 2022: 36-39).

Following the Nordic Bronze Age culture, the Jastorf culture (ca. 500 BCE, cf. also Mallory 1989: 86-7) represents one of the first secure archaeological attestations of the Germanic tribes on European soil, as shown on the basis of hydronymy by Wenskus (1961) and the diffusion of pottery by Birkhan (1970). The actual territorial expansion of this culture "in the broad sense" (*Jastorfskultur im weitern Sinne*) encompasses northern Germany, northern Poland, and southern Scandinavia, although the core of the "narrower Jastorf's circle" (*engerer Jastorfskreis*) can actually be found in the historical regions of Holstein, North-East Lower Saxony, Altmark, and West Mecklenburg (Keiling 1976: 83-88).

In contrast to the Nordic Bronze Age culture, the Jastorf culture is not known to have expanded eastwards to any considerable extent, but, as suggested by the presence of possible Proto-Germanic loanwords (s. Section 2.2 below), it is improbable that trade and, therefore, language contact suddenly came to a halt.

2.2 Baltic and Germanic loanwords in Finnic

With the exception of some loanwords from North-West Indo-European said to correspond to the Corded Ware culture period, that is, around 2200-1800 BCE (Kallio 2012: 227), the bulk of loaned vocabulary in Finnic which is of a more secure attestation points towards the influence of both Baltic and Germanic on Finnic.[2]

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[2] Finnic loanwords in Baltic and Germanic are rather scarce (Saarikivi 2022: 38 and literature cited therein).

Being "the only Indo-European branch that can truly boast a millennia-long continuity in Northeastern Europe" (Kallio 2015a: 78), it is Baltic, or rather, a Baltic variety spoken by speakers assimilated into the Finnic language group (Laakso 2022a: 252), that constitutes one of the main sources of non-inherited lexical material in Finnic (Laakso 2022a; Saarikivi 2022). In the course of time, more than 1000 potential loanwords from Baltic have been suggested (Laakso 2022a: 252), but later scrutiny (Junttila 2015) has suggested that only 250-300 roots can be derived from Baltic with some degree of certainty. From a chronological point of view, Kallio (2008: 274-5) suggests that the Early Baltic loanwords in Finnic can be subdivided into two main waves, one associated with a PBSl. language that preceded the the dialectal subdivision stage, and the other corresponding to another unattested North Baltic language. Terms of Baltic origin encompass several different key aspects of material life, and are especially widespread in the lexical domains of agriculture, technology, kinship, and body parts (Laakso 2022a: 252).

In the context of lexical borrowings, the evidence suggests that also Germanic exerted a strong influence on the Finnic lexicon, already from an early stage (Saarikivi 2022: 36-37). As mentioned above, the expansion of Germanic-speaking populations and, therefore, of Germanic loanwords in Finnic can likely be connected to nautical expansion waves throughout the entire Bronze (and possibly Iron) Age period; these contacts, as the rate of loanwords suggest (only few in Early Proto-Finnic, more in Middle Proto-Finnic, considerably more in Late Proto-Finnic, Kallio 2015b: 26-32), seem to have become more intense with advancements in nautical technology (Kallio 2014). As a result, it is possible to discern at least four different waves of Germanic loanwords in Finnic (LägLoS 1991-2012; Kallio 2012; Laakso 2022), namely 1) Pre-/Paleo-Germanic, 2) Proto-Germanic, 3) Proto-Nordic, and 4) East Nordic.[3] Here it is relevant to point out the antiquity of the first two waves of contact: the first wave's chronological limits correspond, in fact, to the Nordic Bronze Age (Kallio 2012), while the second wave would have taken place roughly during the Pre-Roman Iron Age, during the dispersal of the various Germanic dialects (500 BCE – 1 CE), that is, roughly, during the development of the Jastorf culture (s. Kallio 2012: 230). All in all, more than 500 words were borrowed during the Proto-Finnic stage alone (Kallio 2012: 233-234), involving a wide range

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[3] Even though the lack of a real reflex of the Germanic first consonant shift (also known as Grimm's Law) can sometimes make the choice between Paleo-Germanic and Proto-Germanic an "impossible" one (Kallio 2012: 229), it is feasible (again, according to Kallio 2012: 229) to attribute the earlier Germanic loanword stratum to Pre-/Paleo Germanic, due to the fact that the earliest recognizable loanwords must have preceded the merge of the inherited *ā with *ō, e.g. Paleo-Germanic *sāgja 'seek' (cf. Goth. sōkjan, OHG suohhen) > Pre-Finnic šakï- > Finnish hakea 'seek' (ibid., quoting LägLoS 1991: 68-69).

of lexical domains such as political and military dominance, agriculture, social relations, emotion and perceptions, as well as body-parts (Laakso 2022: 252); given its wide impact, Germanic is therefore generally considered to be an adstrate or even superstrate[4] language for Finnic (Kallio 2014; Laakso 2022; Saarikivi 2022).

In conclusion, several pieces of evidence indicate that Germanic exerted a notable lexical influence on Finnic, and that these contacts have extended for a prolonged period of time. It is now the moment to turn to other "non-lexical" linguistic features that might have been shared, or at least reinforced, during these centuries of prolonged contact.

3   Shared partitive-related morphosyntactic features

3.1   Previous hypotheses on the diffusion of partitive-related phenomena in the Baltic

As shown by Grünthal (2022), the reanalysis of the inherited Proto-Uralic ablative case *-tä* from a spatial into a partitive case with more grammatical functions has taken place to a full extent only in Saami and Finnic, while in Mordvin the ablative-partitive case can actually sport functions of both. The further development of the partitive case in Saami and Finnic seems to correlate with the westwards expansion of the West Uralic branch, and their arrival in the Baltic area. Indeed, one of the longest held views is that the development and spread of the partitive case functions in Finnic is mostly due to contact with Baltic (Larsson 1983, 2001; Koptjevskaja-Tamm & Wälchli 2001; Luraghi *et al.* 2020). This view is particularly favored by Luraghi *et al.* (2020), who point out that a "Balto-Slavic origin for the Finnic partitive can be harmonized with what it is known of Finnic-Baltic contacts in general and their chronology" (Luraghi *et al.* 2020: 883), and that such unidirectionality of influence is also substantiated by the antiquity and direction of loanwords (as seen above).

A more holistic view on the diffusion of partitive-related phenomena in the Baltic area is offered by Seržant (2015). Without excluding the influence of convergence effects on the partitive case in the eastern Baltic area, Seržant (2015) argues for the impossibility of a mono-causal explanation for the diffusion of partitive-related phenomena for the following reasons: i) Baltic, Slavic, and Finnic have all inherited their partitive case markers from their respective proto-languages; ii) different properties have different "hotbeds", that is, different source languages from which they have expanded; and iii) these partitive functions are not uncommon

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[4] This aspect will not be treated in depth here, but the fact that Finnic languages have borrowed, among others, several key terms for indicating specific high-profile societal roles, e.g. PG *kuningaz* 'king' > Fin. *kuningas* 'id.' (LägLoS 1996: 122-3), PG *druhtinaz* 'prince, ruler' > Fin. *ruhtinas* 'id.' (LägLoS 2012: 173), seems to suggest that the Germanic tribes had a decisive impact on the structuring of Proto-Finnic social institutions, thus marking a "clear discontinuity from the earlier Proto-Uralic culture" (Saarikivi 2022: 37).

from a typological point of view (Seržant 2021a,b). Finally, a specific partitive function can be said to be contact-induced only if it is absent from the ancestor language, and if it can be excluded that the phenomenon in question is not a common typological development (Seržant 2015: 400).

For the remainder of the paper, I will concentrate on two specific uses of the partitive case marker, namely the "genitive of quantification" (Section 3.2) and the "genitive of negation" (Section 3.3), first from a broader areal viewpoint, followed by its description in early (and sometimes, also medieval) Germanic languages, and finally by a conclusive paragraph where the previous hypotheses concerning the diffusion of said phenomena are reconsidered given the Germanic data.

3.2 Partitive with numerals

3.2.1 Partitive with numerals in Baltic, Slavic, and Finnic

The partitive case marker can sometimes be found as a complement of a numeral without providing an actual partitive reading. In more technical terms, this can be described as a morphosyntactic phenomenon whereby a numeral (ordinal) NP head governs a partitive-marked complement (Koptjevskaja-Tamm 2001: 562). This phenomenon has also been known under the label "genitive of quantification" (GenQuant)[5], s. (1) below:

1) ja   s″el   **pjat′**   **jablok**
   I.NOM   eat.PAST   **five.ACC**   **apple.GEN.PL**
   'I have eaten five apples' (Russian, constructed example)

It has been suggested (Koptjevskaja-Tamm & Wälchli 2001: 698) that case-governing takes place because numerals behave as nouns selecting for a genitive complement, a fact that is exemplified in (1) above where the numeral is indeed found in its nominative-accusative form. Diachronically, this construction can emerge in those languages where the quantifier phrases are marked by a partitive (Seržant 2021: 143). It is evident, in any case, that no partitive reading is accessible here. GenQuant expressions can be found both as a direct object (as above) or as a subject, e.g. (2):

2) **pjat'**   **devušek**   rabotali   tam

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[5] To my knowledge, the term "genitive of quantification" was used for the first time in the scholarship tradition of Slavic languages, starting from Franks (1994: 600).

five.NOM   girl.GEN.PL   work.PAST.PL   there

'five girls worked there' (Russian, adapted from Boškovič 2006: 99)

Note that this construction may not occur in the presence of verbs and prepositions selecting for an oblique case (Babby 1987; Koptjevskaja-Tamm 2001)[6], nor with certain numerals (s. Table 1 below).

From a cross-linguistic point of view, the GenQuant is quite common in the Circum-Baltic area, as it is attested in several Slavic (Corbett 1978; Babby 1987; Franks 1994; Giusti & Nedžad 2005; Bošković 2006), Finnic (Honti 1997; Koptjevskaja-Tamm 2001), and also Saami (Koponen *et al.* 2022; Rießler 2022) languages. Within this geographically limited area, the phenomenon allows for some variation concerning i) the number (i.e. singular or plural) of the nominal used in the construction, and ii) the numerals triggering government or agreement. As for ii) the only similarity among these languages is that none of them instantiate the GenQuant with the numeral 'one', but, as mentioned above, there is some variation involved. In Finnish, for example, the GenQuant is always expressed with the partitive singular, e.g. *yksi kirja* (**NOM.SG**) 'one **book**' vs. *kolme kirjaa* (**PART.SG**) 'three **books**' (Karlsson 2018: 270). Other languages present a more complicated system: in Russian, the genitive singular is used if the numeral is between 'two' and 'four', whereas the genitive plural is used with numbers from 'five' to 'twenty' (Gvozdanović 1999). In Lithuanian, on the other hand, only numerals from 'ten' onwards trigger the GenQuant, whereas the others show concord (Ambrazas 2006). A sketched summary of the GenQuant in three of the major languages of the CBA is presented in Table 1 below (for a more detailed overview, s. Koptjevskaja-Tamm & Wälchli 2001: 700).

Finnish	'One': case agreement From 'two' onwards: case governing (**partitive singular**)
Russian	'One': case agreement From 'two' to 'four': case governing (**genitive singular**) From 'five' to 'twenty': case governing (**genitive plural**)
Lithuanian	From 'one' to 'nine': case agreement From 'ten' onwards: case governing (**genitive plural**)

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[6] In Russian, this limitation only applies to nouns with a human referent (Max Wahlström, p.c.).

2.2.2 Partitive with numerals in Germanic

The GenQuant is widely attested in all three branches of early Germanic as well[7], e.g. Gothic (Piras 2007; Miller 2019), Old High German (Ellis 1953), Old Low German (van der Wal & Quak 1994), Old Frisian (Bremmer 2009), Old English (Mitchell 1985; Campbell 1991: 285, fn. 3; von Mengden 2010), and Old Norse-Icelandic (Nygaard 1905; Heusler 1921; Sköld 1990; Barnes 2008).[8]

Similar to what has been observed for the other languages, the GenQuant construction in early Germanic languages can perform a variety of functions. First and foremostly, it can be used as an argument, and thus appear as a direct object (3) or as a subject (4):

3) **taihuntaihund   kase**   alewis
   one.hundred   measure-GEN.PL   oil-GEN.PL
   ('"How much do you owe, my lord?" and he said) "One hundred measures of oil"' (Gothic, Lk. 16:5-6)[9]

4) uuarun   thero   the   dar   azzun   ueor **thusunta   manno**
   be.PAST.3PL   this.GEN.PL   that   there   eat.PAST.3PL   four thousand   man.GEN.PL
   'There were, of those who ate, four thousand men' (OHG, *Tatian* ch. 89)

As expected, not every numeral triggers government, and there is some variation in the individual Germanic languages in this respect. In ONI (5) and OE (6), according to the literature, the GenQuant can only be found from 'ten' onwards (s. respectively Barnes 2008:

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[7] Curiously, and despite the vast literature on the matter from a Balto-Slavic and Finnic perspective, the construction has never been addressed in the Germanic literature as GenQuant, nor does there seem to be explicit mention of a cross-linguistic comparison.

[8] Unless mentioned otherwise, all the data presented in this section has been collected and translated by the author.

[9] It can be further observed that this construction is clearly native to Gothic, since the Greek version of the bible on which the Gothic translation is probably based, namely the Majority Text (Ratkus 2011; Falluomini 2015) presents an accusative plural instead of a genitive: *hekatòn bátous* (ACC.PL) *elaíou* '**one hundred measures** of oil'.

121; Mitchell 1985: 217), while in Gothic (7) the numeral triggers agreement only from the number 'thirty'[10]:

5) Flosi   reið   austan   ok   þeir   **tíu tigir   manna**
   Flosi.NOM   ride.PAST.3SG   from.the.east   and   they.NOM.PL   ten   man.GEN.PL
   'Flosi rode from the east and the ten people (who had been at the burning with him)' (ONI, *Brennu-Njáls saga*, ch. 136)

6) gif   he   funde   ðær   **tyn   rihtwisra**   **manna**
   if   he.NOM   find.PAST.3ST   there   ten   righteous.GEN.PL   man.GEN.PL
   'If he found ten righteous men' (OE, *Ælfric's Lives of Saints – Prayer of Moses*, from Los 2000: 266)

7) jah   usnemun   **þrins tiguns**   **silubrinaize**
   and   take.PAST.3PL   thirty.ACC   piece.of.silver.GEN.PL
   'and they took the thirty pieces of silver' (Goth., Mt. 27:9)

A cursory inspection of the data reveals, however, that this state of affairs does not hold true for all Germanic languages. In OHG there are possible occurrences of a genitive plural noun with 'two' (8) and 'four' (9):

8) Thaz   síu   ouh   furi   thaz   kínd   sar
   that   she.NOM   also   for   the.ACC   child.ACC   then
   ópphorotin   góte   thar   [...]   **zua**   **dúbono**   **gimáchon**
   sacrifice.PAST.3SG   God.DAT   there   two.ACC.FEM   dove.GEN.PL   identical.ACC.PL.FEM
   'That she sacrificed to God two identical doves for the child' (OHG, *Evangelienbuch* 1, 14, 23-24)

9) thaz   **mánodo**   sin   noh   **fíari**
   that   month.GEN.PL   be.PRES.3PL   still   four
   '(You say in truth,) that there are still four months (as if, so one says, it would still be the proper harvesting season)' (OHG, *Evangelienbuch* 2, 14, 103-4)

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[10] Piras' (2007:138) indication that the GenQuant can be found starting from the numeral 'twenty' in Gothic is not confirmed by the data, since neither 'twenty' nor other numerals formed on the same decimal have been preserved in Gothic.

These examples do not constitute a partitive expression. In (8), for example, the supposed superset 'doves' is not specific (and there is no mention of doves in the remaining part of the section). Interestingly, the adjective *gimáchon* 'identical' agrees with the numeral in both number and gender. In the modern languages with GenQuant, e.g. Russian (but cf. also (6) above), the adjective would be expected to agree with the numeral instead. This might suggest that the status of the genitive-marked noun was indeed that of a complement, while the numeral (despite being declined like an adjective) could be interpreted as an actual noun. Also observe (10) below from Old English where the GenQuant is present with the numeral 'six':

10) **syx**   synt   muneca   **cynerena**

      six   be.PRES.3pl   monk.GEN.PL   type.GEN.PL

      'there are six types of monks' (OE, *Benedictine Rule*, from von Mengden 2010: 217)

Also in ONI, there are actual examples of GenQuant with the numeral 'nine' (11) and formed with the genitive plural[11]:

11) og   kvöddu   **níu**   **búa**   um   málið

      and   call.PAST.3PL   nine   neighbor.GEN.PL   at   lawsuit.ACC

      'and called nine neighbors for the lawsuit' (ONI, *Brennu-Njáls saga*, ch. 55)

The GenQuant construction could of course also not occur in EG, although there seem to be great variation in this regard: in Gothic, there can be agreement when the numeral is equal or lower than 'thirty' (12)[12], but in other Germanic languages, it can be up to 'forty' and higher (13), suggesting that the construction was being lost in favor the accusative assignment:

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[11] Interestingly, modern Icelandic is not only the sole contemporary Germanic language to present some form of GenQuant that can also impact the semantics of the sentence, but it also does so with the genitive singular: observe the difference between *það eru fimm **menn*** (NOM.PL) *hérna* 'there are five **men** here' vs. *það eru fimm **manns*** (GEN.SG) *hérna* 'there are five **people** here' (constructed example); very interestingly, the GenQuant can also occur with the function of indirect object, e.g. *Spurt hef ég tíu milljón **manns*** (GEN.SG.) 'I have asked ten million **people**', lit. 'ten million of man' (Icelandic, *Sjálfstætt folk: Ljóð Bjarts til Ástu Sóllilju* by Halldór Laxness, example provided by Eiríkur Rögnvaldsson, p.c.).

[12] Translation effects might have played a role in the absence of GenQuant also in numerals higher than 100 in the Gothic deed of Arezzo (6th c. CE), a small text embedded in a larger land sale contract written in Latin (Tjäder 1982: 43-5): *Ik Gudilub 'dkn' þo frabauhtaboka fram mis gawaurhta þus 'dkn' Alamoda fidwor unkjane hugsis Kaballarja jah **skilliggans*** (ACC.PL) *·rlg· andnam jah ufmelida* 'I, the deacon Gudilub, prepared the/this sales-document, from me to you, deacon Alamod, concerning four uncia of the territory Caballaria, and I received 133 **gold pieces** and undersigned' (translation by Miller 2019: 481).

12) athaitands þan   taihun skalkans   seinans

   call,PRES.PART then ten   servant.ACC.PL his.ACC.PL

   atgaf   im   **taihun** **dailos**

   give.PAST.3SG they.DAT.PL ten   mina.pound.ACC.PL

   'After having called his ten servants, he gave them ten mina pounds' (Gothic, Luke 19:13)

13) voru   **menn**   **fjórir tigir** **og** **fjórir** og tveir hestar

   be-PAST.3PL man-NOM.PL forty   and four and two horse.NOM.PL

   '(and on which ship) were there forty-four men and two horses (ONI, *Magnúss saga blinda ok Haralds gilla*, ch. 10)

It has been shown that the GenQuant was common in both early and medieval Germanic languages, and that there is some evidence suggesting it could also take place with numerals lower than 'ten'. It is now time to turn to the hypotheses surrounding the distribution of the GenQuant in the Baltic area, and to evaluate the EG data in this regard.

3.2.3   The GenQuant in the prehistoric Circum-Baltic area

While not at all being a rare phenomenon in Slavic languages (it is also present in Slavic languages away from the Baltic area, e.g. in Slovene, s. Stegovec 2022), the presence of GenQuant in Finnic (but also Saami) has been regarded as "unusual" in the broader Uralic context, where it is generally the quantified nominal that represents the head of the entire construction and can therefore be inflected for case. This situation has led to the conclusion that the construction must have been borrowed in Finnic (Koptjevskaja-Tamm & Wälchli 2001: 701), but the question surrounding the direction of borrowing has not yet been settled.

There are some similarities between Finnic and Slavic, and particularly Russian, in that the construction in Finnic always assigns the partitive singular with all the numerals above 'one', while in Russian the genitive singular is found with numerals from 'two' to 'four' (s. Table 1 above). This aspect, however, appears to be completely coincidental. First, the use of the singular in Russian is the result of a diachronic merge of the original dual number assigned to nouns preceded by 'two' (or 'both') with the homophonous genitive singular case form in the 14th c., followed soon after also by the numerals 'three' and 'four' (GenQuant could already occur from 'five' onwards, Gvozdanović 1999: 192). Secondly, a borrowing from Slavic seems

to be ruled out, also because of the periodization of the contact between Finnic and Slavic (and in particular, Russian), which probably took place at a much later point in time: Slavic expansion in central and northern Russian began only around the first half of the first millennium CE (Yurayong 2020) or, at very latest, at the end of the first millennium CE (Laakso 2020: 526).

The periodization problem, in particular, has led some to put forth the hypothesis that the construction might be due to Baltic influence (Koptjevskaja-Tamm & Wälchli 2001: 701), despite the fact that the current rules for the GenQuant in Latvian and Lithuanian, as shown above, are indeed different. It has been suggested by Koptjevskaja-Tamm & Wälchli (*ibid.*) that the Baltic state of affairs must have been closer to the Slavic one in the past, and has been later simplified. Of course, this cannot be demonstrated directly, and even the earliest Old Lithuanian texts show that the GenQuant followed the same rules as in modern Lithuanian (Ford 1969: 130).

The matter can also be approached from a different perspective. As first suggested by Sköld (1990), the use of the partitive singular in Finnish might be a reflection of a general relationship between the numeral and the noun in Uralic: there are indeed nouns that are always found in the singular, regardless of the numeral that is used, specifically in Mari, Permian, and Hungarian (Koptjevskaja-Tamm & Wälchli 2001: 699-700). Also in Skolt and Kildin Saami (respectively, Koponen *et al*. 2022; Rießler 2022), the formal merge of genitive singular and nominative plural is found assigned to nouns in the presence of numerals from 'two' to 'six', whereas higher numerals would always select for the partitive (but there is no distinction between singular and plural in the partitive form of these varieties, Koponen *et al.* 2022: 205). A similar situation is also found in Mordvin: in Moksha, for example, both the nominative and the ablative singular can used with numerals, e.g. *śada **lomańda** (**ABL.SG**) 'one hundred **people**' (Bartens 1999: 94). All things considered, the similarities between the different numerical constructions in the Baltic area do not revolve around the use of the singular number, but around the use of the partitive marking for numeral constructions (Sköld 1990: 208-9). This suggests, in turn, that there is no need to posit a different system for Baltic languages in order to suggest a Baltic influence on Finnic, since in such a hypothetical contact situation only the partitive case assignment had to be borrowed, while the singular number could have already been there in the first place.

Following this discussion, there seems to be no reason to exclude the early Germanic data from the picture. As shown above, the GenQuant is widely attested in all three Germanic branches (North, East and West); as such, it is probably fair to assume that the construction was

present in Proto-Germanic as well. Contrary to Baltic but similar to Finnic, there is some evidence that numerals below 'ten' could also be found with a partitive complement.

3.3 The partitive under negation

3.3.1 The partitive under negation in Baltic, Slavic, and Finnic

In some languages, and with different degrees of obligatoriness, the partitive case marker is found as an argument marker in negated sentences. This phenomenon is therefore generally known as either "genitive" or "partitive of negation"[13]. Observe that the genitive/partitive in (14b – 15b) alternates with the accusative and the nominative (14a – 15b) in the affirmative counterpart of these Russian and Finnish sentences:

14) a ja   pil   **vodu**
       I.NOM   drink.PAST   water.ACC
       'I drank / was drinking the water'

   b ja   ne   pil   **vody**
       I.NOM   NEG   drink.PAST   water.GEN
       'I didn't drink (any) water' (both examples from Kagan 2013: 5)

15) a kadulla   on   **auto**
       street.ADES   be.PRES.3SG   car.NOM
       'there is a car on the street'

   b kadulla   ei   ole   **autoa**
       street.ADES   NEG.3SG   CONNEG   car.PART
       'there is no car on the street' (adapted from Karlsson 2018: 128)

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[13] As for the preceding construction, I am aware of the fact that the term is also known as the "partitive of negation" (e.g. Miestamo 2014); for reasons of brevity, however, the term "genitive of negation" (and its abbreviation GenNeg) will be used throughout the remainder of the article, in order to take into account the fact that Germanic languages (which constitute the main focus of the present paper) use the genitive case to express the prototypical partitive functions.

While the interplay between negation and NP-marking has generally been regarded as uncommon (Koptjevskaja-Tamm & Wälchli 2001; Miestamo 2014), a recent analysis has found that negation and partitives present some form of interaction in 18 languages (14%) out of a 128 language sample (Seržant 2021a: 148), mostly in languages from Europe (Indo-European, Uralic, Basque) and Vanuatu (Austronesian, ibid., s. also Miestamo 2014).

Most of the languages of the CBA exhibit GenNeg, although different languages exhibit the GenNeg according to different levels of obligatoriness. A different degree of obligatoriness is also associated with a variety of semantic effects as well as restrictions: in Finnish, where the partitive under negation is obligatory (although with some exceptions, Almqvist 1987), the partitive marking under negation is associated with indefinite and partially affected objects (Miestamo 2014); in Russian, where GenNeg has been historically on the wane for several centuries (Krasovitsky *et al.* 2011), genitive marking under negation is more common with abstract, indefinite, and plural nouns, as well as with the expression of possession (Kagan 2013:12); in languages where the GenNeg has almost disappeared, genitive marking under negation is attested almost exclusively in fixed idiomatic (e.g. in Czech, Short 1993: 511-2) or emphatic expressions (e.g. in Latvian, Berg-Holsen 2004: 125), and with predicates expressing possession, as well as existential expressions such as 'not to be' (e.g. Slovene, Priestly 1993: 436-7).

3.3.2 The partitive under negation in Germanic[14]

The early Germanic languages also show traces of case alternation in the presence of negation with the inherited preverbal negator *ni* (Grimm 1837; Delbrück 1893; Koike 2004; Breitbarth *et al.* 2013; Miller 2019; Bucci 2020, *inter alia*), both with direct objects (16-17) and subjects (18-19):

16) noh   tu   ne   habis   **kiscirres**
    furthermore you.NOM   NEG   have.PRES.2SG   vessel.GEN
    'furthermore, you do not have a vessel (to accomplish this)' (OHG, *Christ und die Samariterin*, Dal 1952: 22)

17) ðonne   he   ne   moste   **þæs   fyrstes**

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[14] Unless mentioned otherwise, all the data presented in this section has been collected and translated by the author.

when	he	NEG	might	the.GEN truce.GEN

habban   ðe   he   gewilnode?

have.INF   that   he   desired

'when he might not have the truce that he desired?' (Old English, *Ælfric Homilies*, *Dominica XI. post pentecostem*)

18) þai   ize   ni   kausjand   **dauþaus**
    some.NOM.PL   they.GEN.PL   NEG   taste.PRES.3PL   death.GEN.PL
    '(In truth, I say unto you that there are) some of them that stand here who shall not taste death' (Gothic, Mk. 9:1, Miller 2019: 132)

19) thar   ni   uuas   **uuerodes**   than mêr
    there   NEG   be.PAST.3SG   people.GEN.SG   than.more
    'there was nobody anymore (apart from he alone, a thane who served the supreme God)' (Old Low German, *Heliand*, 860b - 862a)

None of the verbs above selects the genitive obligatorily.[15] As for the GenQuant in the preceding section, genitive marking in the examples above does not signal a partitive expression, but rather conveys the complete absence of the genitive-marked NP.

There are some indications that the GenNeg had some sort of emphatic usage. This can be observed in contexts such as (20):

20) þarei   ni   habaida   **airþa**   **managa**   jah   suns
    where   NEG   have.PAST.3SG   earth.ACC   much.ACC   and   soon
    urrann   in þizei   ni   habaida   **diupaizos**   **airþos**
    sprout   because   NEG   have.PAST.3SG   deep.GEN   earth.GEN

---

[15] Despite the genitive being notoriously common with verbs of consumption (Seržant 2012; Luraghi & Kittilä 2014), the Gothic verb *kausjan* 'taste' selects for the dative case also in other negative sentences e.g. *þaiei ni kausjand dauþau* (**DAT.SG**) 'who will not taste **death**' (Lk. 9:27, Miller 2019: 132). Note, however, that the same verb can be found with the accusative (e.g. Lk. 14:19 or Cor. II 13:5), but in those cases the predicate actually means 'prove'. In Gothic, also the verb *bileiþan* 'leave behind' alternates with the genitive under negation (Miller 2019: 129; Bucci 2020: 93-4).

'(And then another one fell on the stony ground), where it did not have much earth, and it sprang up soon, because it did not have deep earth' (Gothic, Mk. 4:5, Miller 2019: 480)

In (20), the negated nominal *airþa* 'earth' occurs first with the accusative case, then with the genitive in the sentence immediately after. While in some languages the GenNeg is less common with individuated nominals (Timberlake 1986: 345 for Russian), here in Gothic the GenNeg seems to co-occur with repetition in order to stress the absence of the nominal itself (s. Bucci 2020: 92-3).[16]

While the presence of the GenQuant can probably be regarded as uncontroversial due to its wider recognition, the GenNeg is poorly attested in the early Germanic languages, thus casting serious doubts on its actual productivity during the synchronic stage of EG taken into consideration here. According to the author's personal data collection, there are approximately 40 examples of GenNeg in EG[17], divided accordingly among the various languages:

Gothic	Old High German	Old Low German	Old Low Franconian	Old English	Total
15	5	13	1	6	40

Table 2: Distribution of the genitive of negation in early Germanic languages (personal dataset)

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[16] Miller (2019: 480) suggests that the Gothic text should be translated as a partitive genitive ('[some] of (the) deep earth'), and that the presence of the genitive here is due to a calque of the Greek text rather than to a moribund GenNeg construction. While it is true that the construction was moribund in Gothic, the proposed explanation cannot be accepted. First, the Gothic *diupaizos airþos* 'deep earth' is not a perfect calque of the Greek *báthos gẽs* 'depth of earth': in the latter, the text presents two nouns connected by the genitive in an attributive construction, whereas there are an adjective and a noun in the former. Furthermore, Gothic has two words for 'depth', i.e. *diupei* and *diupiþa*, which strengthens the idea that the translator made a deliberate choice to avoid calquing the Greek text here. Second, the reading 'some of the deep earth' requires a quantificational interpretation that cannot be maintained: the 'deep earth' in question is completely absent in the context of the passage (only a generic 'earth' is mentioned earlier); in turn, this implies that the NP cannot receive a definite reading ('the'), but only an indefinite one ('any'). All these factors combined show that we are dealing in fact with a GenNeg construction.

[17] While it is probably safe to assume that the number of examples of GenNeg in EG will likely remain low, there are indications that the GenNeg could be found in Middle High German (Ebert 1999: 28-9), and also in Old Norse-Icelandic (albeit, in both cases, not with the inherited preverbal negator *ni*, but with their respective post-verbal one):

i) ok   hǫfðu   þeir   **hans**   þá   ekki
   and   have.PAST.3PL   they.NOM.PL   he.GEN.SG   then   NEG
   'and they didn't catch him', lit. 'they didn't have of him' (Old Norse-Icelandic, *Njáls saga*, ch. 87)

It could perhaps be argued that these examples might be instances of a generalized partitive expression and, therefore, not a fully developed GenNeg[18]. The generalized partitive is a partitive expression with an elliptical (and mostly indefinite) quantifier; in some languages, this generalization can become the norm and produce partitive expressions where the subset quantifier is an unexpressed indefinite quantity, such as 'some' or 'any' (Seržant 2021: 119). Consider the Lithuanian example below (21), where both sentences (with and without the quantifier *keletą* 'some') are grammatical:

21) Mačiau   (keletą)   jo   kolegų.
    see.PAST.1SG   some.ACC   3SG.GEN   colleague.GEN.PL
    'I saw (some) of his colleagues' (Lithuanian, example adapted from Seržant 2021: 119)

In the context of ancient Indo-European languages, Seržant (2012) observed that Ancient Greek presented some cases of the generalized partitive in both affirmative (22a) and negative contexts (22b):

22) a Trygaῖe   **tôn**   **drepánōn**=te   lámbane
       Trygaeus.VOC   the.GEN.PL   sickle.GEN.PL=PRT   take.IMPV
       '(Formerly my sickles would not have sold at an obolus apiece, today I am being paid fifty drachmae for every one [...]). Trygaeus, take [any] of the sickles' (adapted from Seržant 2012: 122)

    b hōste   ouk   apéthanon   **autôn**
       so.that   NEG   die.AOR.ACT.3PL   they.GEN.PL
       '(They passed by the other four tribes of the Athenians before the latter had returned from the pursuit,) so that [none] of these were killed' (adapted from Seržant 2012: 126)

Focusing on the context of negation, while the example (22b) above presents some form of part-whole-relation and cannot therefore be classified as a genitive under negation, this position

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[18] It has been shown that the generalized partitive represents the preliminary step to the expansion of the partitive in domains beyond the realm of partitivity, including to negation (Seržant 2021a).

cannot be maintained for the Germanic examples provided above. Note first, however, that generalized partitive expressions can indeed be found in EG, as shown by Gothic (23) and Old English (24):

23) ei **akranis** **þis** **weinagardis** gebeina imma

that fruit.GEN.SG the.GEN.SG wineyard.GEN.SG give.PRES.3PL he.DAT

'(And at the season he sent a servant to the husbandmen), so that they should give him (some) of the fruit of the vineyard', Gothic (Lk. 20:10, from Miller 2019: 125)

24) wiþ bryne genim **finules** **niþeweardes**

against burn.DAT take.IMP.2SG fennel.GEN.SG root.GEN.SG

'Against a burn, take (some) fennel root' (Old English, *Bald's Leechbook*, from Middeke 2022: 88-9)[19]

A partitive relationship in the GenNeg in EG above, on the contrary, cannot be obtained: in (16) above, for example, one cannot conclude that the genitive is used to express some type of partitive or quantificational expression (such as **a bit of a vessel* or *any of a vessel*), but rather that said object is completely absent. Indeed, one of the criteria signaling the fact that the GenNeg has grammaticalized in a given language is the fact that it can be used with nouns other than mass nouns and plurals (Seržant 2015: 391), as we can observe from the examples of GenNeg in EG presented above (16-20).

3.3.3 The partitive under negation in the Circum-Baltic area

As mentioned above, the GenNeg is particularly widespread in the CBA Koptjevskaja-Tamm & Wälchli 2001; Seržant 2015; Arkadiev 2016). The phenomenon was already present in the most ancient attestations of several modern CB languages, and can be found in Old Church Slavonic (Lunt 1974: 128-9), Old Lithuanian (Ford 1969: 118), and Old Finnish (25):

25) Et sine senwoxi **heite**

NEG.2PL you.NOM.PL because.of.that they.PART.PL

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[19] Cf. a similar sentence but with an accusative-marked nominal: *wiþ heafordwærce genim **hamwyrt niþewearde** (**ACC.PL**)'* 'against a headache, take **home-wort root**' (*Bald's Leechbook*, from Middeke 2022: 89).

ylenandanut   corwesa

abandon.CON   wilderness.INES

'And you didn't abandon them because of that in the wilderness' (Old Finnish, Nehemiah 9:19, retrieved via *VKS*)

Several different explanations have been proposed to explain the diffusion and development of the GenNeg in the prehistoric Baltic area. Larsson (1983) suggested, for example, that the GenNeg is originally a Baltic feature that has later been copied in Finnic. This hypothesis is largely based on the presence of numerous parallelisms between Baltic and Finnic, namely in the use of the (partitive) genitive case in affirmative and negative contexts, as well as lexical case selection on several (non-loaned) atelic verbs (Larsson 2001: 244-6). Similarly, Luraghi *et al.* (2020) do not favor the view that this phenomenon arose via "multilateral contacts" (*ibid.* 886) and suggest instead that the GenNeg represents (together with other phenomena) an example of a Balto-Slavic calque in Finnic, on the basis of the IE origins and use of the partitive case in Balto-Slavic, and the (admittedly) "[unproven] possibility of more Baltic-influenced morphosyntactic changes in Proto-Finnic taken together with the (proven) presence of Baltic loanwords in Finnic' (*ibid.* 886, cf. also Bjarnadóttir & de Smit 2013: 49-50).

A different view is expressed by Seržant (2015). The fact that the phenomenon is not inherited in Finnic in the same way that it is in Balto-Slavic suggests that the GenNeg represents a "common development" in the languages of the Baltic area, but the view that the phenomenon has been directly calqued from Baltic cannot be substantiated due to the lack of evidence concerning the grammaticalization of the phenomenon in PIE. Furthermore, Mordvin can in fact occasionally employ the ablative under negation (Lytkin & Jevgen'evna Majtinskaja 1978: 109, quoted in Seržant 2015: 392), showing that the emergence of this phenomenon as an internal development within West Uralic cannot be excluded.[20]

While the hypothesis that the GenNeg might have developed autonomously in Finnic (and later reinforced by contact with Baltic) cannot be ruled out, the presence of examples of GenNeg in Germanic does reinvigorate the hypothesis that the phenomenon was also present in North-West Indo-European languages upon their arrival in the Baltic area. The instantiations of the GenNeg in Germanic, however scarce, point to a stage where the phenomenon was on the wane, but the clear difference between the GenNeg examples and other partitive expressions

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[20] It is unclear, however, whether a possible Slavic influence on Mordvin for the emergence of this ablative under negation should be taken into consideration, given the vast influence of Russian on contemporary Mordvin speakers (Amari & Ajanki 2022: 392).

clearly indicates that the phenomenon was grammaticalized, and that it was perhaps present in the PG stage.

4 Summary and conclusions

Having shown how Germanic tribes were not only archeologically present in the prehistoric Baltic area, but also had a non-negligible influence on the Finnic lexicon, two particular partitive phenomena within Germanic have been presented and discussed. I have shown (despite the scarcity of attestations) that these phenomena were widespread in the EG languages that have been presented here. It has been shown, for example, that there are traces of GenQuant triggered by a numeral lower than 'ten' in at least three early and medieval Germanic languages, and that the phenomenon in question (despite a lack of systematization) is indeed present in all the early Germanic branches. As for the GenNeg, despite its overall scarcity and scarce acknowledgment in the literature, it was indeed a feature of many EG languages, found with both finite and non-finite verbs (although, in the latter case, only in Old English); it has also been argued that the phenomenon was disappearing from the EG languages, mostly on the basis of cross-linguistic comparison with other Slavic and Baltic languages. While the solution to the problem of the diffusion of partitive phenomena is far from being settled in the absence of more direct evidence, it is clear that the contribution of Germanic, generally excluded on the basis of its modern attestation, is in need of serious rehabilitation.

References

ALMQVIST, INGRID. 1987. *Om objektsmarkering vid negation i finskan*, Acta Universitatis Stockholmiensis, Studia Fennica Stockholmiensia 1, Stockholm: Almqvist & Wiksell International.

AMBRAZAS, VYTAUTAS. 2006. *Lithuanian Grammar*, Vilnius: Baltos Lankos.

ARKADIEV, PETER. 2016. 'Long-distance Genitive of Negation in Lithuanian', in Axel Holvoet and Nicole Nau (eds.), *Argument Realization in Baltic*, Amsterdam: John Benjamins, 37–81.

BABBY, LEONARD H. 1987. 'Case, prequantifiers, and discontinuous agreement in Russian', *Natural Language & Linguistic Theory* 5, 91–138.

BAKRÓ-NAGY, MARIANNE, LAAKSO, JOHANNA & SKRIBNIK, ELENA, (eds.) 2022. *The Oxford Guide to the Uralic Languages*, Oxford: Oxford University Press.

BERG-HOLSEN, STURLA. 2004. *The Latvian Dative and Genitive: A Cognitive Grammar Account*, Doctoral dissertation, University of Oslo.

BIRKHAN, HELMUT. 1970. *Germanen und Kelten bis zum Ausgang der Römerzeit – Der Aussagewert von Wörtern und Sachen für die frühesten keltisch-germanischen Kulturbeziehungen*, Wien: Österreichische Akademie der Wissenschaften. Philos.-hist. Kl. Sitzungsberichte.

BARNES, MICHAEL. 2008. *A new introduction to Old Norse – Part I: Grammar*, London: University College.

BARTENS, RAIJA. 1999. *Mordvalaiskielten rakenne ja kehitys*, Helsinki: Suomalais-Ugrilainen Seura.

BJARNADÓTTIR, VALGERÐUR & DE SMIT, MERLIJN. 2013. 'Primary argument case-marking in Baltic and Finnic', *Baltu Filologija* 22, 31–65.

BOŠKOVIĆ, ŽELJKO. 2006. 'Case and agreement with genitive of quantification in Russian', Cedric Boeckx (ed.), *Agreement Systems*, Amsterdam/Philadelphia: John Benjamins, 99–120.

BREMMER, ROLF H. 2009. *An introduction to Old Frisian : history, grammar, reader, glossary*, Amsterdam: John Benjamins.

BREITBARTH, ANNE, LUCAS, CHRISTOPHER & WILLIS, DAVID. 2013. 'Incipient Jespersen's Cycle: The (non-)grammaticalization of new negative markers', in Jürg Fleischer & Horst J. Simon (eds.), *Sprachwandelvergleich – Comparing Diachronies*, 141–162.

BUCCI, GIACOMO. 2020. 'Genitive of negation in Gothic', *Amsterdamer Beiträge zur älteren Germanistik* 80(1/2), 76–107.

CAMPBELL, ALISTAIR. 1991. Old English Grammar, Oxford: At the Clarendon Press.

CORBETT, GREVILLE G. 1978. 'Universals in the syntax of cardinal numbers', *Lingua* (46), 355–368.

DAL, INGERID. 1952. *Kurze deutsche Syntax auf historischer Grundlage*, Tübingen: Max Niemeyer Verlag.

DAHL, ÖSTEN & KOPTJEVSKAJA-TAMM, MARIA, (eds.) 2001. *The Circum-Baltic languages*, 2 voll., Amsterdam: John Benjamins.

DELBRÜCK, BERTHOLD (1893). *Vergleichende Syntax der indogermanischen Sprachen. Band 3, Teil 1*, in Brugmann, Karl & Delbrück, Berthold (1886 - 1900), *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen. Kurzgefasste Darstellung der Geschichte des altindischen, altiranischen (avestischen u. altpersischen) altarmenischen, altgriechischen, albanesischen, lateinischen, oskischumbrischen, altirischen, gotischen, althochdeutschen, litauischen und altkirchenslavischen*, Strassburg: Karl J. Trübner.

EBERT, ROBERT P. 1999. *Historische Syntax des Detuschen II. 1300 – 1750*, Berlin: Weidler Buchverlag.

ELLIS, JEFFREY. 1953. *An Elementary Old High German Grammar – Descriptive and Comparative*, Oxford: At the Clarendon Press.

FALLUOMINI, CARLA. 2015. The Gothic Version of the Gospels and Pauline Epistles: Cultural Background, Transmission and Character. Berlin: De Gruyter.

FORD, GORDON B. JR. 1969. *The Old Lithuanian Cathechism of Baltramiejus Vilentas (1579) – A phonological, morphological, and syntactical investigation*, The Hague / Paris: Mouton.

FRANKS, STEVEN. 1994. 'Parametric properties of numeral phrases in Slavic', *Natural Language & Linguistic Theory* 12(4), 597–674.

GIUSTI, GIULIANO & NEDŽAD, LEKO. 2005. 'The categorial status of quantity expressions', *Lingvistički Vidici* 34 121–183.

GRIMM, JACOB. 1837. *Deutsche Grammatik*, vol. 4, Göttingen: Dieterichsche Buchhandlung.

GRÜNTHAL, RIHO. 2022. 'Diachronic bottlenecks of the Uralic (ablative-)partitive', in Silvia Luraghi and Petra Sleeman (eds.) 2022, *Partitives cross-linguistically: Dimensions of variation*, *Linguistic Variation* 23(1), 125–156.

GRÜNTHAL, RIHO & KALLIO, PETRI, (eds.) 2012. *A Linguistic Map of Prehistoric Northern Europe*, Helsinki: Société Finno-Ougrienne.

GVOZDANOVIĆ, JADRANKA. 1999. 'Some remarks on numeral morphosyntax in Slavic', in Jadranka Gvozdanović (ed.), *Numeral Types and Changes Worldwide*, Berlin: Mouton de Gruyter 187–196.

HAMARI, ARJA & AJANKI, RIGINA. 2022. 'Mordvin (Erzya and Moksha)', in Marianne Bakró-Nagy, Johanna Laakso, and Elena Skribnik (eds.) 2022, The Oxford Guide to the Uralic Languages, 392–431.

HEUSLER, ANDREAS. 1921. *Altisländisches Elementarbuch*, Heidelberg: Carl Winter's Universitätsbuchhandlung.

HONTI, LÁSZLÓ. 1997. 'Numerusprobleme (Ein Erkundungszug durch den Dschungel der uralischen Numeri)', *Finnisch-ugrischeForschungen* 54, 1–126.

JUNTTILA, SANTERI. 2015. *Tiedon kumuloituminen ja trendit lainasanatutkimuksessa Kantasuomen balttilaislainojen tutkimushistoria*, Helsinki: Julkaisija Helsingin yliopisto.

KAGAN, OLGA. 2013. *Semantics of Genitive Objects in Russian - A Study of Genitive of Negation and Intensional Genitive Case*, Dordrecht / Heidelberg / New York / London: Springer.

KALLIO, PETRI. 2008. 'On the 'Early Baltic' Loanwords in Common Finnic', in Alexander Lubotsky, Jos Schaeken & Jeroen Wiedenhof (eds.), *Evidence and Counter-Evidence: Essays in Honour of Frederik Kortlandt 1. Balto-Slavic and Indo-European Linguistics*, Amsterdam - New York: Studies in Slavic and General Linguistics 32, 265–277.

KALLIO, PETRI. 2012. 'The Prehistoric Germanic Loanword Strata in Finnic', in Riho Grünthal & Petri Kallio (eds.) 2012, 225–238.

KALLIO, PETRI. 2014. 'Germanic Loanwords in Proto-Slavic', *Finnisch-Ugrische Forschungen* 62, 525–530.

KALLIO, PETRI. 2015a. 'The Language Contact Situation in Prehistoric Northeastern Europe', in Robert Mailhammer, Theo Vennemann gen. Nierfeld, and Birgit Anette Olsen (eds.), *The Linguistic Roots of Europe: Origin and Development of European Languages*, pp. 77–102.

KALLIO, PETRI. 2015b. 'The Stratigraphy of the Germanic Loanwords in Finnic', John Ole Askedal & Hans Frede Nielsen (eds.), *Early Germanic Languages in Contact*, NOWELE Supplement Series 27, pp. 23–38.

KARLSSON, FRED. 2018. *Finnish – A Comprehensive Grammar*, London / New York: Routledge.

KEILING, HORST. 1976. 'Die Entstehung der Jastorfkultur und zeitgleicher Kulturen im Rhein-Weser-Gebiet und deren geographische Verbreitung', in Joachim Herrmann (ed.), *Die Germanen. Geschichte und Kultur der germanischen Stämme in Mitteleuropa*, vol. 1, Berlin: Akademie Verlag, 83–101.

KOIKE, TAKESHI. 2004. *The Analysis of the Genitive Case in Old English within a Cognitive Grammar Framework, based on the Data from Ælfric's Catholic Homilies First Series*, Ph.D dissertation, the University of Edinburgh.

KOPONEN, EINO, MIESTAMO MATTI & JUUTINEN MARKUS. 2022. 'Skolt Saami', in Marianne Bakró-Nagy, Johanna Laakso, and Elena Skribnik (eds.) 2022, *The Oxford Guide to the Uralic Languages*, 196–218.

KOPTJEVSKAJA-TAMM, MARIA (2001). '"A piece of the cake" and "a cup of tea": Partitive and pseudo-partitive nominal constructions in the Circum-Baltic languages', in Östen Dahl & Maria Koptjevskaja-Tamm (eds.) 2001, vol. 2, 523–568.

KOPTJEVSKAJA-TAMM, MARIA & WÄLCHLI, BERNHARD. 2001. 'The Circum-Baltic languages. An areal-typological approach', in in Östen Dahl & Maria Koptjevskaja-Tamm (eds.) 2001, vol. 2, 615–750.

KRASOVITSKY, ALEXANDER, BAERMAN, MATTHEW, BROWN, DUNSTAN & CORBETT, GREVILLE G. 2011. 'Changing semantic factors in case selection: Russian evidence from the last two centuries', *Morphology* 21, 573–592.

LAAKSO, JOHANNA. 2020. 'Contact and the Finno-Ugric Languages', in Raymond Hickey (ed.), *The Handbook of Language Contact*, Wiley: Blackwell.

LAAKSO, JOHANNA. 2022. 'Finnic: General Introduction', in Marianne Bakró-Nagy, Johanna Laakso, Elena Skribnik (eds.) 2022, 240–253.

LägLoS = *Lexikon der älteren germanischen Lehnwörter in den ostseefinnischen Sprachen*, Andries Dirk Kylstra, Sirkka-Liisa Hahmo, Tette Hofstra, Osmo Nikkilä (eds.), 3 voll., 1991-2012.

LANG, VALTER. 2007. *The Bronze and Early Iron Ages in Estonia*, Tartu University Press Humaniora: archaeologica.

LARSSON, LARS-GUNNAR, 1983. *Studien zum Partitivgebrauch in den ostseefinnischen Sprachen*, Uppsala: Almqvist & Wiksell International.

LARSSON, LARS-GUNNAR, 2001. 'Baltic influence on Finnic languages', in Östen Dahl & Maria Koptjevskaja-Tamm (eds.) 2001, vol. 1, 237–256.

LOS, BETTELOU. 2000. '*Onginnan/beginnan* with bare and *to*-infinitive in Ælfric', in Olga Fischer, Anette Rosenbach, Dieter Stein (eds.), *Pathways of Change – Grammaticalization in English*, 251–274.

LUNT, HORACE G. 1974. (1974), *Old Church Slavonic Grammar, sixth edition, completely revised and extended with an epilogue: Toward a Generative Phonology of Old Church Slavonic*, The Hague / Paris: Mouton.

LURAGHI, SILVIA & KITTILÄ, SEPPO. 2014. 'Typology and diachrony of partitive case markers', in Silvia Luraghi & Tuomas Huumo (eds.), *Partitive Cases and Related Categories*, 17–62.

LURAGHI, SILVIA, DE SMIT, MERLIJN & IGARTUA, IVÁN. 2020. 'Contact-induced change in the languages of Europe: The rise and development of partitive cases and determiners in Finnic and Basque', *Linguistics* 58(3), 869–903.

LYTKIN, VASILIJ IL'IČ & KLARA JEVGEN'EVNA MAJTINSKAJA. 1975. *Osnovy finno-ugorskogo jazykoznanija: Pribaltijsko-finskie, saamskie i mordovskie jazyki*. Moscow: Nauka.

MALLORY, JAMES .P. (1989). I*n Search of the Indo-Europeans. Language, Archaeology and Myth*, Thames and Hudson, London.

MIDDEKE, KIRSTEN. 2022. *The Old English Case System – Case and Argument Structure Constructions*, Leiden / Boston: Brill.

MIESTAMO, MATTI. 2014. 'Partitives and negation: A cross-linguistic survey', in Silvia Luraghi & Tuomas Huumo (eds.), *Partitive Cases and Related Categories*, 63–86.

MILLER, GARY D. 2019. *The Oxford Gothic Grammar*, Oxford: Oxford University Press.

MITCHELL, BRUCE. 1985. *Old English syntax*, vol. 1. Oxford: Oxford University Press.

NYGAARD, MARIUS (1905). *Norrøn syntax*, Kristiania: Forlagt af H. Ascheoug & Co.

PARPOLA, ASKO. 2012. 'Formation of the Indo-European and Uralic (Finno-Ugric) language families in the light of archaeology: Revised and integrated 'total' correlations', in Riho Grünthal & Petri Kallio (eds.) 2012, 119–184.

PIRAS, ANTONIO. 2007. *Manuale di gotico: avviamento alla lettura della versione gotica del Nuovo Testamento*, Herder: Roma.

POLOMÉ, EDGAR C. 1987. 'Who are the Germanic People?', in Susan Nacev Skomal & Edgar Polomé (eds.), *Proto-Indo-European: The Archaeology of a Linguistic Problem. Studies in Honor of Marija Gimbutas*, Washington, D.C.: Institute for the Study of Man.

PRONK-TIETHOFF, SASKIA. 2013. *Germanic loanwords in Proto-Slavic*, Amsterdam: Rodopi.

RATKUS, ARTŪRAS. 2011. *The Adjective Inflection in Gothic and Early Germanic: Structure and Development*. University of Cambridge PhD Dissertation.

RIEßLER, MICHAEL. 2022. 'Kildin Saami', in Marianne Bakró-Nagy, Johanna Laakso, and Elena Skribnik (eds.), 219–239.

SAARIKIVI, JANNE. 2022. 'The divergence of Proto-Uralic and its offspring: A descendent reconstruction', in Marianne Bakró-Nagy, Johanna Laakso, Elena Skribnik (eds.) 2022, 28–58.

SCHMIDT, KARL HORST. 1991. 'The Celts and the Ethnogenesis of the Germanic People', *Historische Sprachforschung / Historical Linguistics* 104 (1), 129–152.

SERŽANT, ILJA. 2012. 'Pragmatics and Semantics of the bare Partitive Genitive in Ancient Greek', *Sprachtypologie und Universalienforschung* 65(2), 113–136.

SERŽANT, ILJA. 2015. 'The Independent Partitive as an Eastern Circum-Baltic isogloss', *Journal of Language Contact* 8, 341–418.

SERŽANT, ILJA. 2021a. 'Diachronic typology of partitives', in Petra Sleeman and Giuliana Giusti (eds.), *Partitive Determiners, Partitive Pronouns and Partitive Case*, 111–168.

SERŽANT, ILJA. 2021b. 'Typology of partitives' *Linguistics* 59 (4), 881–947.

SHORT, DAVID. 1993. 'Czech', in Bernard Comrie & Greville G. Corbett *The Slavonic Languages*, London / New York: Rutledge, 455–532.

SKÖLD, TRYGGVE. 1990. 'The Finnish construction *kolme poikaa* and its background', *Nyelvtudományi Közlemények* 91, 74–79.

SPERLING, UWE. 2016. "Bronze Age Connections across the Baltic Sea: Discussing Metalwork as Source of Maritime Contacts in Prehistory", in Hein Bjartmann Bjerck (ed.), *Marine ventures : archaeological perspectives on human-sea relations*, 399–416.

STEGOVEC, ADRIAN. 2022. 'Number in Slovenian', in Paolo Acquaviva & Michael Daniel (Eds.), *Number in the World's Languages – a comparative Handbook*, 187–260.

TJÄDER, JAN OLOF (ed.). 1982. *Die Nichtliterarischen lateinischen Papyri italiens aus der Zeit 445-700*, v. 2, Papyri 29–59, Lund: Gleerup.

TIMBERLAKE, ALAN. 1986. 'Hierarchies in the Genitive of Negation', in Richard Brecht & James Levine (eds.), *Case in Slavic*, Columbus: Slavica, 338–360.

VAN DER WAL, MARIJKE J. & QUAK, AAD. 1994. 'Old and Middle Continental West Germanic', in Ekkehard König and Johan van der Auwera (eds.), *The Germanic languages*, New York: Routledge, 72–109.

VON MENGDEN, FERDINAND. 2010. 'Numeral constructions in Old English', in *Ferdinand von Mengden* (ed.), *Cardinal Numerals - Old English from a Cross-Linguistic Perspective*, 178–247.

WENSKUS, REINHARD. 1961. *Stammesbildung und Verfassung – Das Werden der frühmittelalterlichen Gentes*, Köln: Graz.

YURAYONG, CHINGDUANG. 2020. *Postposed demonstratives in Finnic and North Russian dialects*, Doctoral dissertation, Helsingin yliopisto.

Websites

VKS = Vanhan kirjasuomen sanakirja 'Dictionary of Old written Finnish', Kotimaisten kielten keskuksen verkkojulkaisuja 38. URN:NBN:fi:kotus-201435 ISSN 2323-3370, https://kaino.kotus.fi/vks/?p=main (last access: 18/04/2023)