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Diachronic typology of partitives

The present paper investigates diachronic developments that partitives undergo over the course of time. First, it is shown that true-partitives (part-whole-relation partitives) encoded by adpositional strategies are not stable cross-linguistically and tend to develop into pseudo-partitives, which are defined as constructions that encode simple quantification but retain the morphology of true-partitives. Secondly, the frequency bias towards indefiniteness drives the emergence of *generalized partitives* – partitives with no explicit realization of the subset referent. Generalized partitives tend to undergo a closer relationship with the verb. Moreover, generalized partitives may develop into markers (co-)expressing such predicate-level functions as aspectuality (the delimitative meaning) and discontinuous predicate negation, as well as hypothetical events, as well as develop into differential object markers.

1 Introduction

Cross-linguistically, partitives are found to interact with a variety of grammatical domains ranging from argument-level to clause-level categories such as negation, aspectuality, or hypothetical events. On the argument level, partitives pertain to the domain of indefiniteness and low discourse potential and sometimes even develop into indefinite determiners (as in French or Italian). Moreover, partitives may be coded in different ways: with dedicated partitive pronouns (such as French *en*), with adpositions involving different metaphors such as possession, or spatial metaphors such as separation or location. Finally, there are many languages that do not have special means of marking partitives; instead, these languages employ a mere juxtaposition of an indefinite quantifier with a definite expression (Seržant, forthc.).

The aim of this paper is to identify cross-linguistically recurrent diachronic pathways in the development of partitives. Since most of the linguistic evidence on partitives does not offer any diachronic data, the diachronic evidence will

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be based on some of the few in-depth studies of diachrony of partitives (*inter alia*, Carlier & Lamiroy 2014; Seržant 2015b) as well as on intra-genealogical and extra-genealogical variation of co-expression patterns. Here, typological evidence rests on the database comprising a convenience sample of 138 languages with a total of 171 entries (some languages have multiple options for encoding partitivity) from 46 families ranging across all six macroareas (Eurasia, Australia, Africa, Oceania, and both Americas) (Seržant 2020).

I proceed as follows. Section §2 lays out the conceptual and terminological apparatus, explaining related notions such as *true-partitives* (§2.1), *partitives* (§2.2), *implicit expressions* (§2.3), *pseudo-partitives* (§2.4), and *generalized partitives* (§2.5). Section §3 presents the database for the typological background. Sections §§4–8 are structured chronologically and detail the mechanisms of various changes that partitives undergo. Thus, section §4 illustrates various morphological sources for partitives across languages. Section §5 details the emergence of generalized partitives that is driven by the frequency bias towards indefiniteness (§5.1) via ellipsis to conventionalization (§5.2) and across syntactic macroroles (§5.3). Section §6 discusses the development from true-partitives into pseudo-partitives (§6.1) and the partitivity cycle related to this development (§6.2). Section §7 discusses the change from pseudo-partitives into indefinite-determiner NPs and, then, into unmarked NPs. Finally, Section §8 discusses the emergence of the predicate-level functions of partitives: intensional and hypothetical predicates (§8.1), discontinuous predicate negation (§8.2), and aspectuality (§8.3). Section §9 summarizes the results and provides conclusions.

2 Conceptual and terminological apparatus: *True-partitives, implicit expressions, pseudo-partitives*, and *generalized partitives*

The term *partitives* has been used in a broad variety of meanings in the literature and may refer to a set of categories that are not always straightforwardly interrelated. For this reason, in what follows, I first lay out the terminological apparatus adopted in this paper (see for more details Seržant forthc.).

Unfortunately, there is a lot of confusion with regard to the term *partitive* in the literature. For example, some scholars take this notion to include *meronymics,* that is, parts of a whole that do not belong to the same kind of things such as *a hand* as a part of a body or *a leaf* as a part of a tree, while others – including myself – work only with partitives in which both, the part and the whole, belong

to the same kind, as, for example, in English *some of our students,* where both referents *some* and *our students* belong to the same kind *students*.

Other researchers refer to any kind of expression in the language X that may be translated with a partitive in a language Y – and that is sometimes arbitrarily taken as the gold standard – as partitive as well. For example, the German expression in (1) is also sometimes considered to be a partitive because its English counterpart employs a partitive-like construction with the preposition *of*:

(1) German
ein *Glas Wasser*
INDEF glass water
'a glass of water'

I refrain from extending language-specific definitions onto other languages. Instead, in what follows, I try to give definitions that do not depend on language-particular properties and may thus be applied more objectively for the analysis of the diachronic (and synchronic) variation of partitives across languages.

2.1 True-partitives

Consider the following example:

(2) *some of our students*

In (2), the *true-partitive relation* obtains (cf., *inter alia*, Enç 1991; von Heusinger 2002: 261–262; Koptjevskaja-Tamm 2001), that is, there is a subset denoted by the pronominal quantifier *some* and the superset encoded by the NP *our students*. In addition, there is a marker *of* – an adposition in this case – that signals the relation of inclusion of the subset in the superset. Both referents, the subset and the superset, refer to entities of the same kind (*students*). The meaning of (2) can be said to render proportional quantity.

The true-partitive relation may also hold between portions of a substance such as *tea* in (3):

(3) *a cup of the tea you just made for me*

In this example, there is also a sub-portion and the super-portion of the same kind of substance, and there is an inclusion relation between the two, fully parallel to (2) above.

In what follows, I refer to both subsets and sub-portions as *subsets* and to both supersets and super-portions as *supersets* for the sake of simplicity.

2.2 Partitives

I define *partitive constructions* or, in short, *partitives* as grammatical means that can encode the true-partitive relation. The ability to encode the true-partitive relation is definitional in my approach. Those grammatical items that cannot encode the true-partitive relation at all – such as (1) – are not considered partitives in this paper.

(4) Definition of partitives (Seržant, forthc.)
Partitives are grammatical constructions that may be used to encode the true-partitive relation without relying on contextual inferences. Partitive obligatory encode (i) a quantifier and (ii) the restrictor. Partitives are often encoded by (iii) a special marker or lexically.

Contextual inferences are understood in the narrow sense, excluding the anaphora resolution. Thus, partitive pronouns such as *er* in Dutch *encode* – and not simply implicate – the reference to the superset. Moreover, many pronouns may also be used deictically and, on this reading, partitive pronouns should be able to occur in out-of-the-blue contexts with the true-partitive relation.

The definition in (4) is concededly very broad and it subsumes under partitives everything that is capable of encoding the true-partitive relation without contextual support. Moreover, I employ *partitives* as an umbrella term for different subtypes to be explained immediately below in §2.2–§2.6 and summarized in Table 1 below. Crucially, the definition in (4) excludes any grammatical or lexical items that cannot themselves encode the true-partitive relation without contextual support, even if they may have functional, semantic, or distributional affinities with partitives otherwise.

Importantly, the definition in (4) does allow for partitives to be polyfunctional categories:

(5) A corollary (Seržant, forthc.)
In addition to encoding the true-partitive relation, partitive constructions may also have other (diachronically) related functions.

2.3 Implicit expressions of a true-partitive relation

The definition in (4) also excludes an *implicit expression of a true-partitive relation* (cf. "implicit partitives" in von Heusinger & Kornfilt 2017; or "covert partitives" in de Hoop 2003: 207; "implicit expressions" in Seržant, forthc.), i.e. quantifiers, numerals, and other expressions that may occur in a context in which the partitive interpretation given the context is likely (henceforth *implicit expressions*). While acknowledging the tradition to subsume these under partitives as well, I refrain here from doing so for the following reasons.

Consider example (6b). Here, the quantifiers *some*, *three*, or *a few flowers* do not contain the reference to the superset (the restrictor *flowers* only refers to the kind):

(6) a. *There are flowers in the garden.*
b. *Bring me* ***some / three / a few flowers****.*

The superset can be identified as *the flowers in the garden* only once the first sentence in (6a) is also provided.

Indeed, it would be counter-intuitive to say that *three* is a grammatical expression to encode the true-partitive relation in English; nor *some* or *a few* encode the true-partitive relation in English.[1] A typical property of implicit expressions is that they do not encode the reference to the superset (*the flowers in the garden*) even in a reduced (pronominal) form but only an optional reference to the kind (*flowers*). Moreover, (6b) uttered in an out-of-the-blue context is not likely to be interpreted as designating a true-partitive relation. Implicit expressions themselves do not encode the true-partitive relation and need contextual support to yield this meaning.

In contrast to English *some*, *davon* 'thereof' is a partitive in German:

(7) German (p.k.)
a. *Es gibt Blumen im Garten.*
'There are flowers in the garden.'
b. *Bring mir fünf davon.*
bring me five thereof
'Bring me five of them.'

1 Alternatively, these may be considered as being ambiguous by having two lexical variants in English: the stressed partitive variant and the unstressed non-partitive one (cf. *stressed indefinites* in Hoeksema 1996: 2).

German *davon* does encode the superset which is resolved either anaphorically, as in (7b), or deictically (if (7b) is uttered out of the blue by pointing with a finger to some items). Having said this, indefinite pronouns such as English *some* may come functionally very close to a partitive. For example, the German pronoun *welche* 'some' (not the homonymous interrogative) may indeed be considered to be a partitive, as it patterns very much like *davon* (Glaser 1992).

To summarize, in order to analyse an expression as a partitive and not as an implicit expression, two conditions have to be met: (i) there must be an example in which this expression encodes the true-partitive relation without contextual inferences and (ii) the reference to the superset must be encoded in this example, either deictically, anaphorically, or with a full NP.

Finally, some languages have dedicated lexical partitives that can be used to encode the true-partitive relation without contextual inferences and thus do adhere to the definition in (4). For example, Cora (Uto-Aztecan; Mexico) has dedicated true-partitive quantifiers, cf. *héiwa* 'many (non-partitive)' vs. *mwi'ikáka* 'many.of-ACC (partitive)' (Casad 1984: 265); Haida (isolate) has dedicated, lexical partitive quantifiers such as *t'iij* 'some of' (Enrico 2003: 771, *passim*).

2.4 Pseudo-partitives

For a true-partitive relation to obtain, the Partitivity Constraint must hold. This constraint requires the superset (super-portion) to be a definite specific (non-generic and non-property-denoting/predicate), non-distributional, discursively accessible set (cf., *inter alia*, de Hoop 2003: 186 following Westerståhl 1985; Jackendoff 1977; Barwise & Cooper 1981; Ladusaw 1982; Dowty & Brodie 1984; Ionin *et al.* 2006; Reed 1989).[2] For example, while (8) is formally very much similar to (3), repeated as (9) for convenience, it does not denote the true-partitive relation:

(8) *A cup of tea*

(9) *A cup of the tea you just made for me*

2 There are exceptions to this which have been widely discussed in the semantics literature on partitives, e.g. *that book could belong to one of three people*, where *three people* is indefinite (de Hoop 2003: 183), and various attempts have been made to provide an account for them (cf., *inter alia*, Ladusaw 1982; de Hoop 1997). Moreover, certain definite NPs are nevertheless excluded from occurring as a superset, such as those headed by *both* or, in many instances, *all*.

The utterance in (8) is not a relation at all because it does not involve two referents but only one; hence, no relation can obtain. It is just a quantity or a measure phrase. At the same time, its formal properties are very much similar to the expression of a true-partitive relation in (9): (8) also involves a quantifier (*A cup*) and another NP embedded under the same preposition (*of*). It is since Selkirk (1977) that expressions of this type have been identified as *pseudo-partitive* constructions and delineated from the superficially homonymous true-partitives (*proper partitives* in this volume, see Giusti & Sleeman 2021, this volume) such as in (3).

(10) Definition of pseudo-partitives (Seržant, forthc.)
A pseudo-partitive construction (abbreviated: a pseudo-partitive) is a partitive construction with no specific superset in the restrictor.

While true-partitivity is about proportional quantification, pseudo-partitives denote *plain quantification* such as amounts (e.g. *a group of people*) or quantities (*the majority of people*) of particular kinds (*people*);[3] pseudo-partitives are sometimes referred to as *quantitative partitives* (e.g. Ihsane 2013). Thus, pseudo-partitives do not encode a relation between two referents but rather just one referent that is quantified or measured. Semantically pseudo-partitives pattern with simple measure or quantifier phrases such as *many people* in English or *eine Gruppe Touristen* (lit. 'a group tourists') 'a group of tourists' in German and tend to reduce their original syntactic structure of one NP embedded into the other NP towards just one NP (cf. Selkirk 1977 on English).

Note that there is a tradition of extending the notion of pseudo-partitives to include any kind of measure phrases, including those that have nothing to do with partitives in the respective language. For example, *Glas Wein* (lit. 'glass wine') 'glass of wine' in German is a pseudo-partitive according to some researchers (e.g. de Hoop 2003: 192; Koptjevskaja-Tamm 2001, 2009), while it is not a pseudo-partitive in this framework. Crucially, such a conceptual extension unnecessarily overgeneralizes the original term of Selkirk (1977), making it synonymous with the more transparent term *measure phrase* or *quantity phrase*, for that matter. Moreover, this conceptual extension also produces confusion in languages like English in which *a glass of wine* can no longer be terminologically distinguished from German *Glass Wein* 'glass of wine', which, crucially, does not contain any partitive marker and is a different syntactic construction.

Selkirk (1977) made the important discovery that *a glass of wine* in English – although morphologically similar to the expression of the true-partitive relation

3 Pseudo-partitives may be subdivided into further subclasses (Koptjevskaja-Tamm 2001).

in English (with its head and dependent NPs) – is syntactically (and semantically) a single NP. Thus, the term *pseudo*-partitive is justified for English *a glass of wine* because it is indeed a seeming, that is pseudo, partitive. By contrast, the German *Glas Wein* is straightforwardly analysable as one NP and has no structural, semantic, or morphological affinity to true-partitives in German whatsoever. The latter are encoded by means of the preposition *von* 'from'. Its only relation to partitivity is based on the fact that *Glas Wein* maybe translated with a partitive-like expression in some other languages such as English. An argument *ad absurdum* here may be then that *much wine* in English should also be an instance of pseudo-partitives because it is translated with a partitive-like expression into Russian (with the genitive originally carrying the partitive function) or Basque (with the partitive case) and corresponds to the pseudo-partitive *a lot of wine* in English. Thus, I suggest that the extension of the term *pseudo-partitives* into a purely semantic term is rather ill-advised. Such an extension is also problematic for the description of the diachronic process by which true-partitives first only alternate with, and then develop into, pseudo-partitives and then into simple quantifier phrases like *many people* (see §6). To summarize:

(11) A corollary of definitions (4) and (10) (Seržant, forthc.)
Pseudo-partitives are only found if they exploit the grammatical means that, at the same time, may also be used to encode the true-partitive relation in the language.

Note that pseudo-partitives tend to syntactically deviate from true-partitives. Thus, for English, Selkirk (1977) puts forward syntactic tests which show that there is also a difference in the syntactic structure between true-partitives and pseudo-partitives such as the possibility of extraction of the head NP with true-partitives but not with pseudo-partitives (see also de Hoop 2003 for a similar argument on Dutch).

2.5 Generalized partitives

Partitives – both true-partitive and pseudo-partitive constructions – tend to drop the indefinite pronominal quantifier (often in the head position), especially in languages that generally tend to drop indefinite pronouns, such as in Lithuanian (Indo-European). Contrast (12a) with the explicit indefinite pronominal quantifier *keletą* against (12b) with quantifier drop:

(12) Lithuanian (Indo-European; p. k.)

a. *Mačiau* ***keletą*** *jo* *kolegų.*
see.PST.1SG **some.ACC** 3SG.GEN colleague.GEN(=PART).PL
'I saw **some** of his colleagues.'

b. *Mačiau* *jo* *kolegų.*
see.PST.1SG 3SG.GEN colleague.GEN(=PART).PL
'I saw **[some]** of his colleagues.'

What is originally an occasional drop of the indefinite quantifier is generalized in many languages and the elliptical construction becomes conventional. In effect, the resulting, "headless" partitives undergo developments not undergone by their "headed" pendants and thus turn into a category in its own rights. Therefore, I refer to partitives such as in (12b) as *generalized partitives*.[4]

Generalized true-partitives are not to be confused with implicit expressions (§2.3), which only implicate the superset based on the discourse. Generalized partitives, by contrast, encode both the superset and the subset quantifier, and the latter is inherently 'some' or 'any'. In Section §5 below, I detail the development of generalized partitives and explain the conditioning factors.

2.6 Summarizing the ontology of partitives

I summarize the different subtypes of partitives in Table 1:

Table 1: Ontology of partitives.

	Partitives	
	encoding only the true-partitive relation	**encoding the true-partitive relation and pseudo-partitives**
generalized partitives	*only the restrictor expression is explicit, while the quantifier is understood as 'some/any'*	
headed partitives	*the quantifier & the restrictor expressions are explicit*	

4 Sometimes these partitives are referred to as *independent partitives* (Seržant 2014a, 2014b, 2015a, 2015b). This term is problematic because generalized partitives are not always syntactically truly independent. For example, they tend to enter the case frame of different types of predicates, such as negated or intensional predicates (see below §§8.1–8.2).

3 The data

In this paper, I primarily rely on a few in-depth studies on the diachrony of partitives in different languages. In addition, I employ a database on partitives in order to establish typologically valid co-expression patterns that may be interpreted diachronically. The entire database, published in Seržant (2020), rests on a convenience sample of partitive expressions covering 138 languages, 171 entries from 46 families and all six macroareas, see Figure 1. The sample is biased towards Eurasia (48% of the entries, 82/171).

The data were collected from grammars that have sections devoted to partitives and, in a few cases, by searching for the relevant examples in the grammars (if they lacked such a section or if the section was not informative enough).

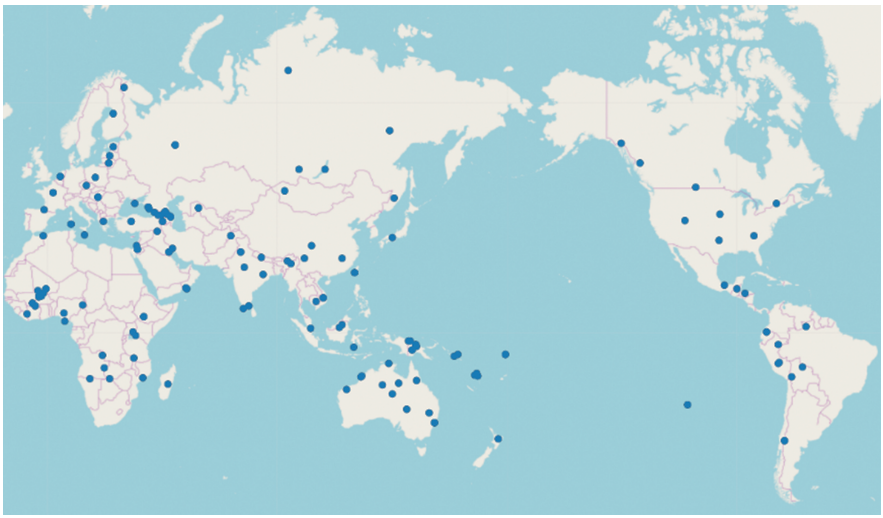

Figure 1: Languages of the database.

Not all examples that were translated with the English partitive *(out) of* were taken into account. For example, *the two of us*, *both of them* (often just rendering the respective dual forms), *none of us*, and *all of us* were not taken into account. The motivation behind this decision was to exclude examples that seem to be partitives solely due to the restrictions on numeral and quantifier modifiers in English and may thus only be a translational phenomenon. Furthermore, in order to exclude implicit expressions such as *some flowers* in (6) (with the partitive meaning produced by contextual inferences), only examples with the supersets explicitly marked as definite (pronouns, demonstratives, etc.) were taken into account.

4 Emergence of partitives

This section provides an overview over the provenance of the morphological markers that may be employed for forming a partitive. Partitive markers vary along the following two variables: the strategy and the type (Seržant, forthc.), as is schematized in Table 2:

Table 2: Coding variation of partitives (Seržant, forthc.).

Type	Strategies				
NP-internal	Possessive	Separative	Locative	Unmarked	other
NP-external, particle	Possessive	Separative	Locative	Unmarked	other

The marking *strategy* concerns the semantic relation the partitive marker is historically based on: the *separative* strategy (13), the *locative* strategy (14), the *possessive* strategy (15), and the *zero* strategy, which is formed by adjoining the indefinite subset quantifier to the definite superset expression (16) (see Koptjevskaja-Tamm 2001, 2009; Luraghi and Kittilä 2014: 55).

(13) Tyvan (Turkic; Russia; Anderson & Harrison 1999: 16)
šay-dan *ižer* *men*
tea-**ABL(=PART)** drink-P/F 1SG
'I'll drink some (of the) tea.'

(14) Oko (Atlantic-Congo; Nigeria; Atoyebi 2010: 132)
ọ̀ọ́rẹ *égbén* *ábẹ* *íbè* *yọ̀* *úbó*
one children DEF.PL **LOC(=PART)** go house
'One of the children went home.'
(Lit. One inside/among the children went home.)

(15) Lavukaleve (isolate; Solomon islands; Terrill 2003: 95)
Aka ma-fan *e*
then 3PL.**POSS(=PART)**-some 1PL.EXCL
fi *e-tau* *vo-foi-re*
1PL.EX.POSS-hand.PL 3PL.OBJ-hold-NF 3SG.N.FOC
'Then some of us held our hands. . .'

Some languages may simply leave the true-partitive relation morphologically unmarked and employ mere bare juxtaposition in which the indefinite (subset) quantifier and the definite restrictor NP are juxtaposed:

(16) Mapudungun (Araucanian; Chile; Smeets 2008: 136)
kiñe-ke *ñi* *pu wenüy*
some-DISTR POSS.1SG PL friend
'some of my friends'

The variable *type* is about the syntactic host: the partitive marker may occur NP-internally, e.g. as an adposition e.g. in (13) above, or NP-externally, as a partitive particle (including both partitive pronouns and quantifiers), which generally tend to cliticize onto the verb as in (17) and (18). The variable *strategy* and the variable *type* are orthogonal to each other.

In (17), the dedicated third-person partitive pronoun 'of it/this/them' cliticizes to the verb:

(17) Itzaj (Mayan; Guatemala; Hofling & Tesucún 2000: 251)
Yan *in-jan-t-ik-i'ij?*
OBLIG 1SG.A-eat-TRN-IIS-PART
'Do I have to eat some of this?'

In (18), the marker *á* is somewhat different in that it is not a pronoun itself but rather a dedicated partitive quantifier ('some of') while the superset is left unexpressed (but has to be understood):

(18) Hdi (Afroasiatic, Chadic; Africa; Frajzyngier 2001: 264)
ndà-'á-ndà
swallow-**PART**-swallow
'he swallowed some of (them)'

Finally, the NP-external type *particle* consists of two subtypes: the partitive pronoun (cf. English 'of them/of it') and the partitive quantifier ('some of/any of'). While these two subtypes are distinct, it is not easy to differentiate between the two in many examples. It is only for this reason that I lump these two subtypes into one type.

4.1 Emergence of the separative, locative, possessive, and other strategies

The separative, locative, and possessive strategies are predominantly based on adpositions (or case affixes), except for the possessive strategy, which may also be based on possessive indexes as in (15) above.

The most frequent source of partitive markers is spatial adpositions. Partitives relying on the separative strategy develop from the spatial relation of *separation* of the Figure from the Ground (Koptjevskaja-Tamm 2001, 2009). This is demonstrably the case in languages such as Russian (partitives based on *iz* 'from'), Latvian (*no* 'from'), Finnic languages (partitives based on the elative and partitive cases), Turkic languages (partitives based on the ablative case), or Semitic languages (partitives based on the ablatival preposition *min*). Even for those languages for which there is no good diachronic evidence at disposal, the co-expression of partitivity and separation is most likely to have originated from the spatial meaning of separation because spatial meanings are usually the original ones, while abstract meanings – such as partitivity – are historically secondary.

For some languages, there is a threefold co-expression pattern: possession, partitivity and separation, such as the French preposition *de* or Dutch *van*. Again, given that spatial meanings are the least abstract ones, they are most probably also the original ones. This assumption is supported by those languages for which there is diachronic evidence at our disposal. For example, in case of the preposition *de* (from Latin *dē*) in Romance languages, the co-expression of separation and partitivity is found already in late Latin, while the possession meaning developed later (cf. Carlier & Lamiroy 2014: 480–481).

While the separative strategy is largely uniform in its spatial source despite minor distinctions, such as *from among* vs. *from inside,* the locative strategy is diachronically more diverse. First, in some languages, it is historically based on the concept of *among/between*. This is, for example, the case in Togo Kan (Dogon). In this language, the postposition *kénɛ̀* 'among' may be used as a partitive marker as well (Heath 2015: 150, §8.2.12). The second subtype is based on the spatial concept of containment ('inside'), such as in Koyra Chiini or Koyraboro (both from the Songhay family). Finally, other locative relations to the Ground are found. Thus, German marginally employs the spatial concept of closure 'at' with the preposition *an*:

(19) German (WWW[5])

Lass	*Deinen*	*Mann*	*doch*	*mal*	***am***		***Fisch*** *probieren*
let	your	husband	PRT	PRT	**at.DEF.DAT.SG(=PART)**	**fish**	taste
und	*beurteilen,*	*ob's*		*salzig*	*ist*		
and	judge	whether=it		salty	is		

'Let your husband taste **the fish** and tell whether it is salty.'

5 http://www.gesundehunde.com/forum/archive/index.php/t-87252.html

Some languages may employ several of these subtypes. For example, Jamsay (Dogon) marks the superset NP with either *bɛ̀rɛ̂:* 'in' or with *gănǹ* 'between' without any clear meaning difference (Heath 2008: 471).

In Seržant (forthc.), I have argued that the different strategies are areally biased. Thus, languages of Eurasia prefer the separative strategy while the locative strategy seems to be more dominant in languages of Africa. The zero strategy is primarily found in languages of Oceania.

4.2 Emergence of NP-external, particle-marked partitives: Partitive pronouns and partitive quantifiers

Partitive pronouns typically stem from pronominal spatial demonstratives or third-person pronouns that sometimes also incorporate a particular spatial affix or an adposition. For example, the clitic partitive pronoun *-i'ij* in Itzá (Mayan) is homophonous with the locative demonstrative pronoun *-i'ij* 'there' (Hofling & Tesucún 2000: 304, 306) and is, therefore, likely to historically descend from it (the locative strategy).

A number of Bantu languages employ clitic locative indexes for marking partitives (Persohn 2017; Persohn & Devos 2017). Thus, Luvale (Bantu) employs the location index *ku-* (class 17) as is found in (20) (Persohn & Devos 2017: 4). Its partitive use is demonstrated in (21):

(20) Luvale (Bantu; Horton 1949: 50)
Ali ***ku****-zuvo* *yasakananga* ***ku****-ze.*
be.3SG 17-house of_so_and_so 17-yonder
'He is at that house there.'

(21) Luvale (Bantu; Persohn & Devos 2017: 22)
eji *ku-ly-anga* ***ku****-ku-lya* *c-ami*
AUX 15-eat-HAB 17(=**PART**)-15-food 15-POSS.1SG
'He eats of my food.'

The location indexes in the partitive meaning are attached on the top of the noun with its lexical classifier (*ku-*, class 15 for 'food' in (22)). Historically, the partitives in Bantu typically derive from the so-called second series of demonstratives or referential demonstratives of these locative classes, which typically have anaphoric uses such as 'there' plus additional information that the locative class provides (e.g. *in*-landmark or *from*-landmark) (Persohn, p.c.). The situation found in Luvale is found in many other Bantu languages, which employ the locative

indexes for marking different types of partitives (cf. the overview in Persohn 2017, Persohn & Devos 2017).

Another example of a partitive particle (pronoun) is the partitive pronoun *en* in French, *ne* in Italian, or *nde* in Sardinian stems from the separative deictic *indē* 'from there' in Latin, which is also originally a demonstrative pronoun employed in the separative strategy. The spatial, separative meaning thereof is still retained in French (22):

(22) French (Giusti & Sleeman 2021, this volume)
Ils en sortent.
3PL PART/DEM come-out
'They come out of it.'

By contrast, the partitive pronoun *er* in Dutch stems from the old genitive form of the third-person pronoun (Old Dutch *iro* 'of them') (Philippa et al. 2003), representing the possessive strategy. The same holds for the different partitive pronouns found in German dialects such as *ərə* (cf. Standard German *ihrer* '3PL.GEN'), *sn̥* (*seiner* '3SG.M/N.GEN') and *əs* (*dessen* 'DEM.M/N.GEN.SG'), which all originally stem from genitive forms but after the loss of the adverbial and adnominal genitive in German dialects were no longer realized as such (Glaser 1992: 124).

While partitive pronouns discussed above are only possible in the third person, a few languages allow partitive pronouns in all persons. Thus, the partitive pronouns in Eibela (Bosavi; Papua New-Guinea) – 1PL *ni:jɛ:*, 2PL *gi:jɛ:*, 3PL animate *i:jɛ:* – inflect for all three persons (Aiton 2016: 117). These pronouns evidently derive from the plural personal pronouns and their forms are analysable as plural pronouns with the affix *-jɛ:* which is homonymous with the locative marker and thus most probably stems from it: 1st *ni:jɛ:* from *ni:-jɛ:* 1PL-PART, 2nd *gi:jɛ:* from *gi:-jɛ:* 2PL-PART, 3rd animate *i:jɛ:* from *i:-jɛ:* 3PL-PART.

Another frequent source of the partitive particles is the pronominal use of indefinite existential quantifiers such as English *some* or *one*. This is the case in a number of Oceanic languages such as Boumaa Fijian with the partitive marker *soo*, Avava (*tuut ier*) and many other Oceanic languages (cf. Budd 2014: 534–535) or possibly with the class 18 bound verbal partitive particles in some Bantu languages such as *=mo* 'one, some' in Nyakyusa (Persohn 2017: 161). The German indefinite pronoun *welche* (and its dialectal variants) seems also to undergo the development towards a partitive pronoun (cf. Glaser 1992; Strobel 2017; Sleeman & Ihsane 2021, this volume).[6]

6 Thus, in contrast to, for example, English *some* or German *einige*, it has abandoned its attributive use found in Early Modern German and some Low German dialects (Glaser 1992: 126).

This second source of partitive markers is very different from the spatial demonstratives and personal pronouns in terms of definiteness of the source. Spatial demonstratives and personal pronouns are inherently definite while existential quantifiers such as *some* or *one* are inherently indefinite. The grammaticalization path is also very different. While partitive quantifiers develop from the quantifier slot of the partitive construction and often have the meaning 'some of', demonstratives and pronouns develop from the restrictor slot of the partitive construction and have the meaning 'of them/of it'.

4.3 Emergence of dedicated partitives

Adpositions and cases used to encode partitivity may sometimes develop into dedicated partitives, that is, lose their original – e.g. spatial – meaning, retaining only those meanings that are related to partitivity. For example, this is the case with the partitive case of the Finnic languages, which no longer attest the original separative meaning. The original ablative meaning has been lost in this branch of Finno-Ugric (except for some residual adverbs, cf. Koptjevskaja-Tamm 2001).

The development into a dedicated partitive marker is found in 9% (9/95[7]) of the languages in my sample. Moreover, while the possessive strategy never seems to develop into a dedicated partitive, the separative strategy gives rise to dedicated partitives most frequently while losing its original spatial meaning, see Table 3:

Table 3: Dedicated partitivity markers.

Separative	Locative	Possessive
17%	4%	0%

For example, in addition to Finnic languages, a dedicated partitive case stemming from an ablative is found in Kryz (Nakh-Daghestanian). Here, the subelative case came to be used exclusively for partitivity-related functions, while its spatial meaning has been taken over by a new postposition (Authier 2009: 82):

7 Unclear strategies as well as unmarked partitives have been excluded here, thus reducing the total number of partitives under consideration to 95.

(23) Kryz (Nakh-Daghestanian; Russia; Authier 2009: 190)
zi-va-z *vardavlat.ci-kar* *vuts'-ru-zin*
1SG-2SG-DAT wealth.F-**SUBEL(=PART)** give-EVT.F-1SG
'I will give you my fortune.'

In Archi and in Khwarshi (Nakh-Daghestanian), the dedicated partitive case stems from an earlier inter-elative (Kibrik 1977: 174; Khalilova 2009). In northern Siberian Turkic languages such as Yakut and Tofa, there is a dedicated partitive case marker in *-DA*. Its spatial origin is not entirely clear. It is often assumed to descend from a locative case of Proto-Turkic (see Ubrjatova et al. 1982: 134; Nevskaya 2017: 278). However, the same case has been used to denote the source of motion (in addition to the locative meanings) in Old Turkic as well, cf. *tengri-de* /sky-DA/ 'in the sky, from the sky' (Ubrjatova 1982: 134, Nevskaya 2017: 279; Erdal 2004). Other Turkic languages have renewed the marking of partitivity by the ablative case that is, however, not etymologically related to the old case in *-DA*.

4.4 Expansion of partitives along lexical classes of verbs

There is much overlap in semantic classes of verbs that are early attested with partitives in different languages. Thus, partitives tend to occur with consumption verbs such as 'to eat' or 'to drink' and not, say, with destruction verbs such as 'to kill', at an early stage of development. These – and possibly some other – verbs represent the lexical core of partitive constructions and, accordingly, are the first ones to be used with partitive objects. For example, there is evidence that the ablative case of Proto-Finnic – to develop into the partitive case in modern Finnic – was used with consumption verbs on its partitive function. Larsson (1983) suggests that the Mordvin (partitive) ablative reflects the general Proto-Volgaic stage, which further developed in the Finnic subbranch (also Kiparsky 1997). Yet, Mordvin primarily attests consumption verbs – 'to eat', 'to drink' – along with some other verbs with the ablative case on the direct object used in the partitive function (Itkonen, 1972: 170; Larsson, 1983: 125ff.; Kiparsky 1998).

Similarly, the generalized partitive genitive in ancient Indo-European languages such as Ancient Greek or Vedic Sanskrit (*inter alia*, Schwyzer and Debrunner 1950; Kuryłowicz 1964: 184; Dahl 2014: 422–424) is most frequently attested with consumption verbs.

Likewise, Carlier & Lamiroy (2014: 485, 493) also find that the generalized-partitive use of *de* in late medieval Romance languages (e.g. in Old French) first spreads to objects of consumption verbs as 'to drink' or 'to eat' as well as to transfer verbs such as 'to give'.

Likewise, consumption verbs such as 'to eat' or 'to drink' as well as transfer verbs such as 'to take' are also those verbs where generalized partitives persist longer if the entire category is being gradually lost in the language. For example, the partitive genitive in contemporary modern Russian is a recessive category and yet it is mostly found with these verbs. Carlier & Lamiroy (2014: 502) report the same phenomenon for Spanish, which has almost entirely lost the partitive use of *del* found in Old Spanish.

The reason for this special role of consumption verbs is their semantics. These verbs cross-linguistically tend to demote or leave out their objects most frequently (Malchukov 2015: 105–106; Næss 2017: 127; Seržant et al., forthc.). Thus, in a typological study of transitivity, Malchukov (2015: 105–106) and Seržant et al. (forthc.) find that 'eat' is one of the most frequent verbs that demote their object, e.g. via an antipassive or just in terms of A-preserving lability.

5 From headed to generalized partitives

This section deals with the loss of the explicit expression of the (subset) quantifier and with the generalization of the indefinite interpretation thereof. Thus, in Lithuanian, the subset quantifier is frequently left unexpressed; contrast (24a) with (24b):

(24) Lithuanian (Baltic, Indo-European)

a. *Mačiau* ***keletą*** *jo* *kolegų.*
see.PST.1SG **some**.ACC 3SG.GEN colleague.GEN**(=PART)**.PL
'I saw **some** of his colleagues.'

b. *Mačiau* ***Ø*** *jo* *kolegų.*
see.PST.1SG 3SG.GEN colleague.GEN**(=PART)**.PL
'I saw [**some**] of his colleagues.'

I refer to partitive expressions that generalize the indefinite meaning of the subset quantifier, leaving it for this reason unexpressed as in (24b), as *generalized partitives*.

In what follows (§§5.1–5.3), I sketch the development from headed into generalized partitives and the motivations for it.

5.1 Frequency bias of the subset quantifier

A true-partitive expression requires two referents in order to be properly interpreted: the subset and the superset (§2.1). While the latter must be definite and familiar, the former can be either definite or indefinite. Examples with the definite subsets are primarily confined to superlative constructions that often build on partitives (cf. English *He is **the best among them***) but sometimes also include predicative, focal subsets and some other minor types as in (25) below (see also Table 4 below):

(25) Russian (Slavic, Indo-European)
Vsego na ekzamen prišlo 28 studentov.
'28 students came to the exam altogether.'
Iz nix tol'ko ja smog sdat' ekzamen.
from 3PL.GEN only 1SG.NOM be_able.PST pass.INF exam.ACC
'Out of them, only I was able to pass the exam.'

However, in the vast majority of cases, the subset quantifier tends to be indefinite in and across languages. The tendency is so strong that most of the grammars consulted in this study do not even provide examples of partitives with definite subsets. To corroborate this observation with corpus data, a small corpus survey has been carried out on the basis of the oral subcorpus of the Russian National Corpus. I have annotated the first 300 hits of the expression *iz nix* [lit.] 'from them', which tends to predominantly occur in the true-partitive construction in Russian (Table 4). Among the 300 hits, 277 instances were indeed true-partitive expressions, with both definite and indefinite subsets:

Table 4: The relative frequency of the definite vs. indefinite subsets to the superset *iz nix* 'from them' in the Russian National Corpus (www.ruscorpora.ru), the oral subcorpus.

	INDEFINITE					DEFINITE	
	quantifier[8]	one, any[9]	interrog.[10]	numeral	no one[11]	superlative	other
	115	80	28	21	18	11	4
Total	262 (**95%**)					15 (**5%**)	

8 Including: *nekotorye* 'some', *kakie-to* 'some', *neskol'ko* 'some', *každyj* 'each', *mnogie* 'many'.
9 Including: *odin* 'one', *ljuboj* 'any', *kakoj-to* 'any', *kto-to* 'a person', *drugie* 'others'.
10 Including: *skol'ko* 'how many', *kotoryj* 'which', *kto* 'who', *kogo* 'whom'.
11 Including: *nikto* 'no one', *ni odin* 'not any one'.

The figures in Table 4 show that partitives are heavily biased towards indefiniteness of the subset with ca. 95% ($p < 0.001$, χ^2). Accordingly, many languages exploit this strong frequency asymmetry and implement a more efficient coding by creating reduced forms of the subset quantifier. Given its overwhelming frequency, the indefinite subset is the expected default. It thus does not need as elaborate a coding as definite subsets, which are the unexpected option (form-frequency correspondance in Haspelmath 2008a, 2008b, 2008c).

There are two ways in which languages respond to this frequency asymmetry: the (subset) quantifier is either mentioned by a reduced-coding device or is left unexpressed. In Syer (Atlantic-Congo), the indefinite quantifier morpheme may also encode the true-partitive relation (Dombrowsky-Hahn 2015: 299). For example, in (26), the partitive is conveyed by the indefiniteness suffix that is attached to the definite NP 'our women' with no partitive marker:

(26) Syer (Atlantic-Congo; Dombrowsky-Hahn 2015: 299)
mɛ̀ wò čɛ̌-plāà sɔ̀ nìwuruꜜ.
CONS our woman-INDEF marry even
'. . . and even married some of our women.'

Most frequently, however, the indefinite subset quantifier is simply left unexpressed. Thus, in Lithuanian, the subset quantifier is frequently left unexpressed: see (24b), repeated here as (27) for convenience:

(27) Lithuanian (Indo-European; p. k.)
Mačiau ***Ø*** *jo kolegų.*
see.PST.1SG 3SG.GEN colleague.GEN=PART.PL
'I saw [**some**] of his colleagues.'

Notably, the omission of the indefinite quantifier in the subset position may occur very early in the development of a partitive. For example, the new partitive marker *dē* 'from' of Vulgate Bible Latin may already be used without the quantifier:

(28) Late Latin, approx. 4th c. (*Ezechiel 39,17*; Carlier & Lamiroy 2014: 480)
Et sic de pane illo edat.
and thus from bread.ABL.SG DEM.ABL.SG eat.SUBJ.3SG
'And so let him eat of that bread.'

The conditions on leaving out the quantifier may vary cross-linguistically and may also depend on whether indefinite pronominal referents generally have to be

coded in particular syntactic slots at all (cf. the subject indefinite *man* in German) or may simply be left unexpressed.

Partitive pronouns may also develop into generalized partitives. For example, partitive pronouns in Eibela (Bosavi; Papua New-Guinea) 1st *ni:jɛ:*, 2nd *gi:jɛ:*, 3rd animate *i:jɛ:* (Aiton 2016: 117) have generalized the indefinite quantifier 'some':

(29) Eibela (Bosavi; Papua New-Guinea; Aiton 2016:119)
nɛ:na: ***i:jɛ:*** *o:-mɛ:na:*
1DU **3.PART** shoot-FUT.1
'We two will shoot **some of them**.'

Here too, the pronoun itself provides the referent of the restrictor while the quantifier is understood as indefinite 'some' or 'any'.

Cross-linguistically, the development of generalized partitives is a very frequent phenomenon that is found in many languages. Thus, 45% (52/115) of all adpositional partitives in my database allow for leaving the quantifier unexpressed.

Generalized partitives are distinct from partitives not only in the non-expression of the quantifier but they also gradually develop into a category that is functionally and structurally distinct from headed partitives. For example, the generalized partitive of Finnish (marked by the partitive case) very often codes functions such as discontinuous negation or aspectuality that cannot be encoded by the partitive with an explicit quantifier (unless the latter is itself a generalized partitive).

5.2 Morphosyntactic traces of the subset quantifier

At an initial stage, the dropped indefinite quantifier may leave behind traces in the morphosyntax of the hosting clause, and the partitive construction may show properties of ellipsis (*pro* in formal terms). For example, the generalized partitive encoded by the genitive (the possessive strategy) in ancient Indo-European languages such as Ancient Greek, Avestan or Old Russian shows a number of behavioural properties – to be abandoned in the later stages – that are very much reminiscent of an ellipsis rather than of a conventionalized zero (Seržant 2012, 2015b).

Thus, the generalized partitive genitive of Ancient Greek is not restricted syntactically as to which syntactic position it may occur in. It can replace any NP of the clause including non-argumental accusatives (so-called *accusativus graecus*) or datives despite its genitive case-marking (Seržant 2012). It can, furthermore, be coordinated with otherwise-case-marked NPs, including lexical cases. For example, the partitive-genitive-marked NP may be coordinated with

non-structural NPs such as the instrumental-marked object in Old Russian, consider (30):

(30) Old Russian (Georgios Monachos' Chronicle)
vl(d)č(s)tvovalъ ***Asourieju*** ***i*** ***Persidoju***
govern.PST.M.SG Assyria.**INS**.SG and Persia.**INS**.SG
i ***pročixъ*** ***stranъ***
and other.GEN**(=PART)**.PL country.GEN**(=PART)**.PL
souštixъ *na vъstocě*
be.PARTC.GEN**(=PART)**.PL on East
'He ruled over **Assyria and Persia and [some] of the other countries** in the East.'

Furthermore, the number value of the unexpressed quantifier may also be cross-indexed on the verb. This is found in Ancient Greek and Avestan along the schema in Table 5:

Table 5: Cross-indexing generalized partitives on the verb.

The value of the implicit subset	'[**one**] of the mortals'	'[**some**] of the philosophers'
The value of the verbal index	**Singular**	**Plural**

(31) Ancient Greek (Eur. *Her.* 976–977; Seržant 2015b: 140)
ouk ésti *thnētôn* *hóstis* *exairḗsetai*
NEG be.**3SG** mortal.GEN**(=PART)**.PL REL.NOM.SG rescue.FUT.3SG
lit. 'there is no(t a single) mortal who would rescue (him)'

(32) Ancient Greek (Arist. Hist. Anim. 513a; Seržant 2015b: 141)
Eisì *dè* *kaì* *tôn* *perì* *fúsin*
be.PRS.**3PL** PRT and DET.**GEN(=PART).PL** about nature
'There **are [some]** of the nature philosophers . . .'

Accordingly, I adopt the following stages in the development of generalized partitives established in Seržant (2015b: 148) on the basis of comparison of the partitive genitive in some ancient Indo-European languages with – etymologically the same – partitive genitive in modern Indo-European languages:

(33) Intermediate stages in the emergence of generalized partitives (Seržant 2015: 148)
Explicit subset quantifier > elliptical, implicit quantifier with traces in morphosyntax > no traces of the quantifier

Garifuna (Arawakan) patterns very much with Ancient Greek when it comes to the partitive in the subject position and its cross-indexing on the verb. Here, the logical number and person values of the implicit quantifier are cross-indexed on the verb (Barchas-Lichtenstein 2012: 189; Seržant 2015: 138–139), cf. (33):

(34) Garifuna (Awakan; South America; Barchas-Lichtenstein 2012: 189)
Éibagua-tiyan *wá-dagiya*.
run-T3**PL** P1**PL-FROM(=PART)**
'[**Some**] of us ran.'

In (34), the number of the left-out quantifier 'some' is plural and the person value is third person while the restrictor is first person. It is these values that are cross-indexed on the verb.

There are more languages like that. These languages too attest the properties of ellipsis rather than of a conventionalized zero when the generalized partitive is in the subject position, cf. the plural index on the verb in Armenian (35) and Jibbali (36):

(35) Modern Eastern Armenian (Indo-European; Dum-Tragut 2009: 313)
R˚adio-y-ov *heťarjak-v-um* *ēin* *Hovhannes*
radio-INS broadcast-PASS-PTCP.PRS AUX.PST.**3PL** Hovhannes
T'umanyan-i *patmvack'-ner-ic'*.
T'umanyan-DAT story-**PL-ABL(=PART)**
'Some of Hovhannes T'umanyan's stories were broadcasted on the radio.'

(36) Jibbali (Afroasiatic, Semitic; Oman; Hofstede 1998: 42)
mən *ɛ́-yɔ́* *dᶜɔd* *yəzir* *īḳbért*
from(=PART) DEF-people still.3M.SG/C.PL visit.IMPF.**3M.PL** DEF.tomb
'some people still visit a (saint's) tomb'

Eventually, morphosyntactic traces of the implicit quantifier are often lost. The non-expression of the indefinite quantifier is conventionalized and generalized partitives start their own life as an independent category. The verb assumes the default, non-agreeing form. This final stage of (33) is found, for example, in

Standard Russian or Lithuanian. In these languages, the generalized-partitive subject always occurs with the singular (neuter) index of the verb regardless the logical value of the referent. Moreover, the generalized partitive in these languages cannot occur in slots other than direct objects and intransitive subjects of some verbs (Seržant 2014a, 2014b, 2015a).

5.3 Expansion of generalized partitives across syntactic macroroles

Generalized partitives are inherently indefinite, which is why they are most likely to occur as objects due to the well-known frequency association of syntactic roles with (in)definiteness: while direct objects are often indefinite, transitive subjects are typically definite (Comrie 1981: 128; DuBois 1987; Croft 1988). It is due to this tendency that transitive subjects are very unlikely to be coded by generalized partitives while direct objects are perfectly compatible with them.

The category of the intransitive subject, in turn, is intermediate, and there are intransitive predicates – typically existential or presentational predicates – that often occur with an indefinite argument. Accordingly, it is precisely these intransitive subjects that are often coded by generalized partitives; in fact, it is the default encoding of the subject of an existential predicate in languages such as Lithuanian or Finnish (Moravcsik 1978; Larsson 1983: 142–144; Sands and Campbell 2001: 256; Seržant 2013: 336–337, 2015a: 359; Huumo 2021, this volume). In (37), I suggest that generalized partitives expand from direct objects to transitive subjects through the subjects of intransitive, existential predicates:

(37) Expansion of generalized partitives across grammatical roles[12]
(i) *direct objects only* > (ii) + *existential, inactive subjects* > (iii) + *some transitive subjects*

Stage (ii) is the most frequently attested one among generalized partitives, for example, in Lithuanian and North Russian (Seržant 2014a, 2014b), Latgalian (Nau 2014), Ancient Greek (Nachmanson 1942), Sanskrit and Avestan (Dahl 2014: 439). The expansion of the partitive marker *del*-Noun in Old French also proceeded from direct objects to intransitive subjects and then to transitive subjects, thus documenting the entire cline in (37) (Carlier & Lamiroy 2014: 494–495).

As argued above, stage (iii) is extremely rare because transitive subjects are the least compatible with the inherent indefiniteness of generalized partitives. Stage (iii) is marginally found in colloquial Finnish (Huumo 2018) but not, for instance, in the closely related Estonian. Armenian may have partitive-ablative

intransitive subjects and direct objects (Dum-Tragut 2009: 313) but not transitive subjects, thus documenting stage (ii) in (37).

The cline in (37) might also apply to partitive pronouns/quantifiers. Thus, the partitive pronoun *en* in French cannot occur in the transitive-subject and the intransitive subject slot unless there is an adnominal modifier (Lagae 2001: 46), thus, documenting stage (i) in (37). By contrast, the partitive prefix/clitic *ʔa'-/aa-* in Tlingit (Athabaskan-Eyak-Tlingit) can replace both the subject and the object prefixes (Leer 1991: 123–124), analogically the partitive pronouns in Eibela (Bosavi) (Aiton 2016: 117). Thus, both languages might represent stage (iii) with their partitive pronouns.

Finally, the rare occurrence of partitives in non-structural, oblique positions might be related to the general tendency across languages to overtly mark oblique relations while readily allowing for efficiency-driven zeros in the structural positions (cf. Comrie 1989: 128). Since partitives often do not encode semantic relations to other constituents of their clause, it seems that the pressure for overt marking of an oblique relation is the reason for restricting partitives to structural positions only (cf. Kornfilt 1996: 131 on Turkish).

6 From true-partitives to pseudo-partitives: The partitivity cycle

Above (4), I have defined partitives as grammatical constructions that may encode the true-partitive relation, which involves a proportion of two sets or two portions. The *true-partitive relation* is different from *plain quantification* as in *much wine, a lot of water, a glass of wine*, and so forth, which only involves one set or one portion and, hence, no proportion and no relation between any two sets is available. Yet, partitives frequently undergo the extension of their function from encoding the true-partitive relation only to the ability to encode plain quantification as well. This semantic extension is frequently found with both headed and generalized partitives. This development paves the way for new, argument-level functions (differential-object marking and indefiniteness markers, §7) and clause-level functions pertaining to aspectuality or negation with generalized partitives (§8). Before I turn to these new functions of generalized partitives, I first describe the semantic extension of partitives from the true-partitive relation only to include the denotation of plain quantification as well (§6.1) and the cyclic emergence of partitive markers (§6.2).

6.1 Expansion from encoding only the true-partitive relation to encoding plain quantification as well

Partitives, which originally encode true-partitive relation only, often extend their function to include plain quantification. In the latter case, the partitive is pseudo-partitive, see the definition thereof in (10) above (term introduced in Selkirk 1977). Thus, the partitive construction marked by *of* in English can have two different functions: encoding of the true-partitive relation (38) and encoding of the plain quantification (39):

(38) *Yesterday I had **a cup of the tea that I made for you.***

(39) *Yesterday I had a **cup of tea**.*

Historically, the extension from (38) to (39) proceeds via gradual violation of the Partitivity Constraint. Recall that pseudo-partitives are partitive constructions with no discursively restricted superset (§2.4, cf. the definition in (10) and (11)). The latter is replaced by a kind-referring expression such as *tea* in (39), which is not a set. With a kind-referring expression, neither the complement nor the superset can be meaningfully defined in terms of sets. To summarize, even though (39) formally coincides with (38), it is semantically very different from it.

What superficially may look like just loosening selectional input restrictions on the restrictor to include kind-referring expressions thus produces a category that is semantically no longer conceivable in terms of the true-partitive relation between two sets/portions: for example, the concept of *proportion* between the subset and the superset is no longer available with pseudo-partitives. Proportion is replaced by the concept of a more abstract relation, namely, the one between a kind of objects and a quantity of its instantiations. I suggest that the development of pseudo-partitives and the abandonment of the Partitivity Constraint proceeds diachronically along the following stages:

(40) Demise of the Partitivity Constraint[12]
(i) *discursively defined supersets only* > (ii) *+ (discursively) defined types* > (iii) + *kinds*

12 '+' means 'in addition to' because very often the original meaning is not entirely lost and can still be encoded by the given expression in a limited number of contexts.

Accordingly, the developments in (40) lead to new functions and properties of the partitives that undergo them:

(41) Different types of partitives resulting from the demise of the Partitivity Constraint (38)[12]
(i) *true-partitives* > (ii) + *faded partitives* > (iii) + *pseudo-partitives*

The constructed examples in (42) illustrate the three stages (i)–(iii) in both (40) and (41):

(42) a. *Yesterday, I had a cup of the tea that you bought for me.*
b. *Yesterday, I had a cup of the tea that you always buy for me.*
c. *Yesterday, I had a cup of tea.*

In (42a), the relative clause denoting a particular, referential event disambiguates the embedded NP *the tea* as a particular amount of *tea* that qualifies it to be a superset (the super-portion). As a result, the whole expression in (42a) is a true-partitive. In (42b), however, there is a generic event in the relative clause that blocks the referential interpretation of the definite article of *tea*. The head NP is interpreted, accordingly, as referring to the kind specified by the relative clause and not as a particular amount of *tea*. Consequently, it cannot be interpreted as a super-portion, or portion at all, and the whole expression is no longer a true-partitive. Still, there is a contrast between (42b) and (42c) in that the former has a definite, familiarity-based sub-kind of tea (*the tea that you always buy for me*), while the latter is even less informative, containing just the bare kind *tea*. The partitives with a familiarity-based definite kind in the restrictor position as in (42b) have been called *faded partitives* in de Hoop (2003):

(43) Dutch (de Hoop 2003: 193)
Els at van die smerige bonbons
Els ate of those filthy bonbons
'Els ate some of those filthy bonbons ("you know").'

The *you-know*-meaning highlighted in (43) is referred to as *faded partitive* in de Hoop (2003: 193). 'Those filthy bonbons' refer to a kind that is assumed to be familiar to the hearer, featuring stage (41.ii).

Faded partitives represent a transitional stage towards pseudo-partitives, which do not impose any familiarity requirement on the restrictor at all. Diachronically, the difference between (41.i) and (41.ii) – crucial for the development of the pseudo-partitive function – boils down to the ambiguous interpretation of defi-

niteness of the embedded NP: a definite NP may highlight either the familiarity of the referent or the familiarity of the referent's kind. The latter is found in (41.ii) and, as has been suggested in Koptjevskaja-Tamm (2009: 341), it is precisely this ambiguous nature of definite expressions that creates bridging contexts towards pseudo-partitivity (cf. also Carlier & Lamiroy 2014: 486).

The second step of the development from (41.ii) to (41.iii) is the entire abandonment of the Partitivity Constraint. The restrictor NP may now also include generic and kind-referring expressions with no familiarity at all, as in:

(44) Ossetic (Indo-European; Bagaev 1965: 156)
Nartxor-æj *æryssadtoj* *dyuuæ* *tonnæjy*
maize-**ABL(=PART).SG** ground two tonnes
'They ground two tons of maize.'

The development into pseudo-partitives makes the partitive construction more compatible with less individuated objects such as 'maize' (44) or 'peppercorns' (45) that typically do not occur individually, whereas true-partitives seem to pattern better with more individuated referents, such as human beings (Carlier & Lamiroy 2014: 486).

(45) Old French (translation of Albertus Magnus, *De falconibus*, BNF fr. 2003, 15th c.; Carlier & Lamiroy 2014: 486)
Pren *des* *grains* *de poyvre*.
take.IMPV.2SG PART.DEF.PL grain.PL of pepper
'Take some peppercorns.'

Different languages show different progress on the cline in (40). For example, English attests all three steps (i)–(iii) of the cline in (40), as illustrated by the examples in (42). The development (40.i–iii) is also well documented for the partitive marker *de* in Romance languages in which it originally, i.e. in Latin, Old French, Old Spanish, and Old Italian, only encoded the true-partitive relation (Carlier & Lamiroy 2014).

By contrast, the Dutch preposition *van* covers only the first two steps (i)–(ii) of (40): definite supersets and definite, familiar kinds. The same holds for the following languages and their partitive markers: German *von*, Imonda *-ia-nèi* (Border), Itzaj *-i'ij* (Mayan), Boumaa Fijian *soo*, Avava *tuut ier*, and many other Oceanic languages (cf. Hofling & Tesucún 2000: 251; Budd 2014: 534–535).

Cross-linguistically, the co-expression of the true-partitive relation and plain quantification with partitives is very frequent. Thus, 53% (61/116) of all partitives in the database that are based on the strategies other than the zero strat-

egy allow for the meaning of plain quantification as well and may thus pattern as pseudo-partitives. From this it follows that partitives encoding only the true-partitive relation are quite unstable diachronically and tend to drift towards plain quantification. Indeed, old partitives tend to be increasingly associated with the pseudo-partitive use, while the true-partitive relation requires new markers (*partitivity cycle*, §6.2). The frequency of co-expression does not predict the direction of change itself, of course. However, there is diachronic evidence for precisely this direction of change with partitives based on the adpositional strategies (the locative, separative, and possessive strategy, including possessive indexes) and partitive pronouns.[13] I illustrate this in the next section.

6.2 Partitivity cycle

A number of languages attest a renewal of partitives, which I refer to as the *partitivity cycle* (in analogy to the famous Jespersen's cycle of negation). When a partitive is frequently used as a pseudo-partitive, that is, at stage (40.iii), often there is already a new partitive construction that only encodes the true-partitive relation. During this emergent stage, different markers may be employed interchangeably and only later is just one marker conventionalized as the new partitive marker. For example, Latin employed the old Indo-European, possessive strategy to encode partitives (with the genitive case). In parallel, late Latin has developed new partitive constructions based on the separative strategy with the prepositions: *ex, dē, a(b)*, all denoting 'from'. Later Romance languages conventionalized only *de* (from *dē*). Similarly, Ancient Greek developed, in addition to the ancient possessive strategy, the separative strategy marked by prepositions *apó* 'from' or *ek(s)* 'from' (Nachmanson 1942), while only *apó* is conventionalized in Modern Greek. Likewise, German and Dutch developed the separative strategy with the preposition *von* and *van*, respectively, while the original possessive strategy (the genitive case) – still attested in earlier German (Glaser 1992: 120) – is on the verge of disappearance. Slavic languages have conventionalized distinct separative prepositions, as in Russian *iz* 'from' vs. Serbian *od* 'from', when replacing the old possessive strategy. Similarly, Baltic languages, with Lithuanian *iš* 'from' vs. Latvian *no* 'from', developed new partitive constructions that can only express the

13 By contrast, partitive quantifiers and unmarked partitives are inherently and originally ambiguous between pseudo-partitives and true-partitives.

true-partitive relation.[14] Finnish and Saami employ the elative case (a more recent separative strategy) for the true-partitive relation instead of the older (separative) strategy with the partitive case (originally ablative) (Alho 1992; Itkonen 1972: 181). Many modern Turkic languages introduced the new strategy of encoding partitivity – namely with the ablative case – while losing the older partitive case in *-DA*. The latter is attested only in northern Siberian Turkic languages such as Yakut or Tofa, as well as in Old Turkic (Ubrjatova 1982: 134; Nevskaya 2017: 278; Erdal 2004). The partitive case in *-(r)ik* in Basque can no longer encode the true-partitive relation at all, residing in the domains typical of pseudo-partitives such as negation, hypothetical events (conditionals), or with some quantifiers (cf. López 2014; Etxeberria 2021, this volume).

Recall that the emergence of new partitive markers is subject to macro-areal pressures. In Seržant (forthc.), I have argued that, for example, Eurasia is heavily biased for the separative strategy, which is not the case in Africa or Oceania.

7 From generalized pseudo-partitives to indefiniteness markers and unmarked NPs

Concomitantly to the semantic change in (40), partitives undergo the syntactic change from two constituents into one NP. A partitive construction encoding the true-partitive relation maximally consists of two NPs corresponding to the subset and the superset referent, respectively. Thus, *some of our students* consists of NP1 *some* and NP2 *our students*, and the two NPs are linked by the preposition *of*.[15]

The gradual development towards a single NP construction involves reductional changes in the internal syntactic organization (Selkirk 1977; De Hoop 2003). The development into a single NP proceeds along the following steps:

(46) Reduction of the syntactic structure along with the development into generalized partitive and then into pseudo-partitive in (40) and (41)
(i) *[NP1] adposition [NP2]* > (ii) *adposition [NP1]* > (iii) *determiner [NP]* > (iv) *ø [NP]*

14 It is possible that this intragenetic variation in modern Slavic and modern Baltic stems from optionality in the earlier language layers similar to the variation among the three separative prepositions found in Latin.

15 NP2 is also frequently syntactically embedded under NP1, but this is less relevant here (see Seržant, forthc., for an overview).

Observe that the development from (46.i) to (46.ii) also involves the emergence of the generalized-partitive construction in which the quantifier is generalized as 'some' or 'any' and is therefore left out, unexpressed.

The reduction of the syntactic structure in (46.i–iv) is well-documented in a number of languages. For example, faded partitives based on *van* in Dutch come close to (46.iii). Faded partitives, such as *van die smerige bonbons* in (43) above, no longer syntactically pattern as prepositional phrases but rather as simple NPs with regard to a number of syntactic tests such as extraction, for example (de Hoop 2003: 193).

A well-documented case is the development of the preposition *dē* from Latin into an indefinite plural/mass-noun determiner in modern French or Italian (Carlier & Lamiroy 2014; Cardinaletti & Giusti 2015). The original state of (46.i) is found in the following example:

(47) Latin, 1st c. BC (Cicero, Mil. 24,65)
si quis de nostris hominibus
if any **DE** our.ABL people.ABL
'if any of our men'

The development of *dē* into generalized partitive, as in (46.ii), is found in the following example from Late Latin:

(48) Late Latin, approx. 4th c. AD (*Ezechiel 39,17*; Carlier & Lamiroy 2014: 480)
Et sic de pane illo edat.
and thus **DE** bread.ABL.SG dem.ABL.SG eat.SUBJ.3SG
'And so let him eat of that bread.'

Finally, already in Old French as well as in modern Italian and French, the adposition *dē*, turned *de*, developed into a modifying quantifier or a determiner (46.iii). For example, it can now co-occur with prepositions that themselves do not govern it:

(49) Old French, 16th c. (translation of Albertus Magnus, *De falconibus*; Carlier & Lamiroy 2014: 487)
Et le lendemain le fault tresbien
and DET following_day 3SG.ACC.M must.PRS.3SG very_well
*oindre **avecques du** savon.*
rub.INF **with** **DE**.DEF.M.SG soap
'And the following day, you have to rub him very well with soap.'

Another property of (46.iii) is its ability to trigger verbal agreement from the subject position – something that is atypical for NPs headed by oblique adpositions and rather normal for NPs with modifiers or determiners:

(50) French
Des *hommes* *sont* *venus*
DE.DEF.PL man.**PL** AUX.**3PL** come.PARTC.PST.**PL**
'Some men arrived.'

Thus, Gallo-Romance varieties attest the development from (46.i) to (46.iii) but not to (46.iv), at which stage the former partitive marker becomes a residual morpheme with no particular meaning.

A parallel development is found in some North Russian dialects (Indo-European), Veps (Uralic) (Lytkin et al. 1975: 108; Koptjevskaja-Tamm & Wälchli 2001: 658; Seržant 2015a: 396, 2015b) and very rarely in Finnish (considered mostly ungrammatical, T. Huumo, p.c.). In these languages too, the partitives may denote plain quantification and occur as generalized partitives (stage (46.ii)). Moreover, generalized partitives in the subject position may be indexed on the verb according to the number value of the (former) restrictor (i.e. NP2 in (46)). In contrast with French, however, cross-indexing is found only occasionally and is not at all obligatorily:

(51) North Russian (Trubinskij in Seržant 2014b: 311)
k jim *vsegda ljudej* *na-begut*
to them always people.**GEN(=PART).PL** many-run.3**PL**
'So many people run to them (that there is no place for an apple to fall).'

(52) Sujsar' North Russian (Markova in Seržant 2014b: 311)
Tut-to *medvedej* *byvajut,* *tol'ko malo*
here-PRT bear. **GEN(=PART).PL** occur.3**PL** only few
'There are bears, but only few.'

(53) Sujsar' North Russian (Markova in Seržant 2014: 311)
A *kto* *rabotal pokrepče, tak* *ix* *byli*
but who worked stronger, CONJ 3**PL.GEN(=PART)** be.PST.PL
'As regards those who worked harder, there were (some) of them.'

(54) Veps (Uralic; Lytkin et al. 1975: 108)
endę ***kikat*** ***pidelībad*** *moŕźmīd'*
earlier married.woman.**PART.PL** carry.PST.3PL cap.ACC.PL
'Earlier married woman used to wear caps.'

Thus, it can be said that the partitive NP in these languages behaves just as an indefinite nominative (plural) NP, which means that the partitive (genitive) case-marking is no longer perceived as a case, which is stage (46.iii).

Note that similar to the development of generalized pseudo-partitives into quantifiers and determiners in (46), headed pseudo-partitives may also undergo the same development by which the quantifying NP turns into a modifying quantifier that does not block cross-indexing of the restrictor; consider English:

(55) a. *A group of students* ***was*** *present there*
b. *A group of students* ***were*** *present there*

The original construction is (55a) in which the subset nominal (*a group*) is cross-indexed on the verb. By contrast, the development of *a group* into a quantifier makes the whole construction semantically and syntactically a single NP, very much like *some students*. Accordingly, in (55b), it is the former restrictor that provides the number value that is cross-indexed on the verb.

Finally, in some languages, the partitive marker, turned indefinite determiner, entirely loses its original semantics, yielding an unmarked pattern with no particular meaning (stage (46.iv)). Stage (46.iv) is found in some languages in which quantifier phrases have to be marked by an oblique marker that is originally the partitive marker. This is most prominently known from Slavic, Finnic, and Baltic languages, as for example in Russian:

(56) Russian (p.k.)
pjat' *stolov*
five table.GEN.PL
'five tables'

Here, the numeral phrase has be formed by the genitive case on the kind-referring NP 'tables'. Likewise, some existential quantifiers like *neskol'ko* 'some' also require the genitive marking on the dependent noun:

(57) Russian (p.k.)
neskol'ko stolov
some table.GEN.PL
'some tables'

The presence of the genitive – originally the partitive genitive – is obligatory and does not indicate definiteness or indefiniteness. Finally, the differential, animate-object marking of Slavic languages goes back to the genitive-under-negation, which, in turn, stems from the partitive genitive, as described in §8.2 below (Klenin 1983; Krys'ko 1994, 1997, 2006).

Parallel examples are found in Wolaytta (Na-Te-Omotic; Lamberti & Sottile 1997: 216), Central Moroccan (Afroasiatic), and Ossetic (Indo-European):

(58) Central Moroccan or Rif Berber (Kossmann 2000: 108, 160)
tlata n twrar
three **GEN** hill
'three hills'

(59) Ossetic (Indo-European; Arys-Djanaïéva 2004: 107)
Fondz xædzar-y
five house-**GEN.SG**
'five houses'

A similar situation is found in Finnic languages. Here too, some numeral and quantifier phrases require the partitive case on the noun, which, however, does not contribute any meaning.

Moreover, there is a trend in some Finnic languages to expand the partitive marking to all direct objects in terms of the default object marking. For example, the frequencies of the partitive case in the same parallel text in Estonian and Finnish are very different, with Estonian having many more partitives than Finnish (Lees 2004: 2). Accordingly, Estonian now strongly prefers partitive marking of pronominal objects in the singular of the first and second person as well as of the reflexive pronoun regardless of the semantics (including the totality contexts). What is more, the partitive marking even became obligatory in the plural across the board, even in the contexts of totality and definiteness with no negation or intensionality in the clause (L. Lindström, p.c.; Lees 2004: 1). Contrast the accusative with a noun in (60) with the partitive case on the personal pronoun in (61) in the same sentence:

(60) Estonian (Uralic; L. Lindström, p.c.)[16]
Ma pesin lapse / ta puhtaks
I wash.PST.1SG child.**ACC.SG** / 3SG.ACC clean.TR
'I washed **the child/(him/her)** clean.'

While singular indistinguishably allows for both options, plurals take only the partitive case (Liina Lindström, p.c.):

(61) Estonian (Uralic; L. Lindström, p.c.)
*Ma pesin *teie / teid puhtaks*
I wash.PST.1SG *2PL.ACC / 2PL.**PART** clean.TR
'I washed **you (pl)** clean.'

Thus, the partitive marking has achieved stage (46.iv) with plural pronouns in Estonian.

Similarly, to various degrees the partitive became the only direct-object marking option in other South Finnic languages as well: Livonian (Kont 1963: 103–106; Tveite 2004: 38–39), Votic (only rarely can accusative plural forms be found) (Markus & Rozhanskiy 2011: 230). The default partitive is also found in the North Finnic Ingrian (Rozhanskiy, p.c.), and even Saami (e.g. in the eastern Saami branch in Russia), which has generalized the former partitive plural as the only direct-object plural marker, that is, as an accusative (Itkonen 1972: 178). Finally, on the lexical level, many verbs in Estonian have generalized the partitive marking of their direct objects (Tamm 2006); the same is also true for Russian or Lithuanian (Seržant 2014a, 2014b) and many other languages.

8 Generalized partitives developing the meanings related to intensionality, negation, and aspect

In some languages, generalized partitives interact with such predicate-level domains as verbal quantification and, thus, aspectuality (§8.3). Independently from this, and often earlier, generalized partitives may co-express predicate nega-

16 Note that the accusative case is syncretic with the possessive genitive case in the singular and with the nominative case in the plural in Finnic languages. Thus, there is no dedicated, unambiguous accusative case in Estonian.

tion (§8.2) and intensionality (§8.1). Drawing on Larjavaara (1991), I adopt the chronology of these functions (cf. also Seržant 2015a: 358) shown in Figure 2:

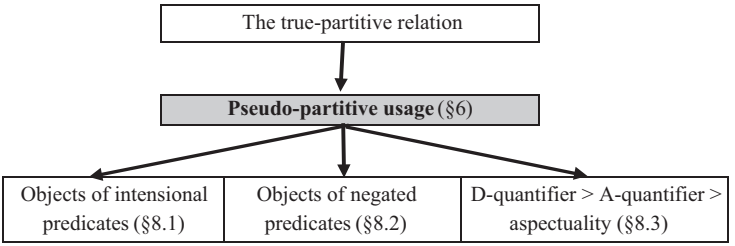

Figure 2: The relative chronology of negation, intensionality, and aspectuality.

8.1 Generalized partitives with intensional and hypothetical predicates

Intensional verbs allow for two interpretations of their objects: a specific or transparent meaning (the speaker has a particular referent in mind as the object) and an opaque, non-referential meaning, i.e. with no existential presupposition (Quine 1960: §32; Zimmermann 1993), property-denoting reading (Borschev et al. 2007; see also Neidle 1988: 31; Partee 2008).[17] For example, the English verb *to seek for* does not require its object to exist, as one can seek for magic items or a new planet, whereas under normal circumstances other verbs require their objects to exist (e.g. *to look at, to destroy*). Note that the correlation between partitives and hypothetical events is not accidental. It has been observed in the literature that hypothetical events (e.g. irrealis) may be encoded by different kinds of object demotion devices such as antipassive, for example (Givón 2001: 168).

In more archaic Indo-European languages, the partitive (genitive) was able to take over this function. Subsequently, partitives were lexicalized as the only object marking available with some of these predicates. For example, the Lithuanian verb *ieškoti* 'to seek' (Ambrazas, ed., 2006: 486, cf. also Endzelīns 1951: 558 on earlier Latvian) or the verb *iskati* 'to seek' in Old and dialectal Russian require the genitive marking of the object, which goes back to the originally partitive (genitive) marking.

17 Intensional meanings are concepts and are opposed to extensional meanings, which have referents; they should not be confused with *intenTional* contexts (Cruse 2000: 21).

Hypothetical events are very much similar to intensional contexts in that neither require their object to exist. For example, grammatical categories such as modality (62), the future tense (63), imperative mood (64), or purpose constructions (65) denote events that are non-referential and hypothetical and thus do not impose existential requirement on the direct objects (Seržant 2014a: 290–293, 2014b: 298–301):

(62) Lithuanian (Indo-European; Ambrazas, ed., 2006: 486; Seržant 2014a: 290)
Noriu *stal-o* *su* *keturi-omis* *kėd-ėmis*
want.PRS.1SG table-**GEN(=PART)**.SG with four-INS.PL.F chair-INS.PL
'I want (to have) a table with four chairs.'

(63) Lithuanian (Indo-European; Seržant 2014a: 290)
Važiuosiu *egl-ės* *pirkti*
drive.FUT.1SG Christmas_tree-**GEN(=PART)**.SG buy.INF
'I will go (to a marketplace) to buy a Christmas tree.'

(64) North Russian (Indo-European; Mansikka in Seržant 2014b: 299)
Prinesite *okutki*
bring.PFV.IPV.2PL blanket.**GEN(=PART)**.SG
'Bring the blanket!'

(65) North Russian (Indo-European; Mansikka in Seržant 2014b: 298)
Pošla *golovy* *poloskat'*
go.PST.F.SG head.**GEN(=PART)**.SG wash.IPFV.INF
'She went to wash (her) head'.

Similarly to the examples from Lithuanian and North Russian above, in a number of Finnic languages such as Finnish, Karelian, Ingrian, and Veps the partitive case is the default object marking with imperatives, embedded purpose clauses typically controlled by some motion verbs, modal verbs such as 'want' or 'try', future auxiliaries such as 'to be going to' (Larsson 1983: 84–85, 92–93, 103–104).

Likewise, the partitive case (*-DA*) of Yakut and Tofa (Turkic, Siberian) is only used with imperatives (Ubrjatova et al. 1982: 134), and, in Dolgan, with intended events as well ('I will tell you a story (PART)' (Ubrjatova 1985: 117). Furthermore, the partitive prefix *ni-* in Cherokee (Iroquoian) may denote hypothetical events rendered by English 'almost' (*I almost forgot . . .*) (Montgomery-Anderson 2008: 313). Similarly, the partitive verbal clitic *-te* in Apma "is often exploited to underline the uncertainty of hypothetical situations, desires, requests and attempts," such as in irrealis expressions of intention or prospect (Schneider 2010: 167):

(66) Apma (Austronesian; Vanuatu; Schneider 2010: 167)
Ani na=n veb=te nge teweb.
but 1SG=IRR talk=**PART** just a.little.bit
'But I'll just talk a little bit.'

8.2 Generalized partitives under predicate negation

The use of partitives under predicate negation is not entirely typologically uncommon (pace Koptjevskaja-Tamm & Wälchli 2001: 729; Miestamo 2014: 67). Thus, 14% of marked partitives in my database (18/128) show some interaction between partitives and predicate negation. Most of these languages cluster in two geographical areas: Europe and Vanuatu.

Thus, a number of languages in Europe employ discontinuous negation markers that are – or historically go back to – partitives: French, modern Finnic languages, Welsh, Polish, Old Russian, and Lithuanian. However, ancient Indo-European languages (such as Ancient Greek or Latin) do not show any indication of obligatoriness. The discontinuous-negation function of the partitive is therefore historically secondary in modern Indo-European languages.

Likewise, the ablative case (Proto-Volgaic **-ta*) found in the Volgaic branch of Uralic must have first developed partitive functions and only later acquired the discontinuous-negation function as the comparative evidence suggests (Kiparsky 1997). Thus, in the Mordvin subbranch of Volgaic, one predominantly finds pseudo-partitive functions of the ablative (*-də/-tə* in Moksha) but no interaction with predicate negation, which is likely to be the original state of affairs in Proto-Volgaic. By contrast, most languages of the Finnic subbranch of Volgaic do require the partitive marking of the object under predicate negation in terms of a discontinuous negation marker.

The partitive preposition *o* was also obligatory with definite objects under negation in Middle Welsh (Borsley et al. 2007: 312). The same seems to be true for Old Russian as well, where, however, the accusative started penetrating into negative contexts very early.

Outside of Europe, the obligatoriness of partitives under negation is found in a number of languages of Vanuatu (Austronesian). For example, the partitive particle, turned clitic, is obligatory with transitive verbs with non-generic objects in Paamese (Crowley 1982: 147), Lewo, Lamen, South-East Ambrym, Atchin (Early 1994: 81, 84–86, 89), with prohibitives in Apma (Schneider 2010: 127), in Raga (Vari-Bogiri 2011: 149), in Araki (François 2002: 68), and in some other languages of Vanuatu:

(67) Paamese (Austronesian; Oceania; Crowley 1982: 145)
Ro-longe-(tei)* *inau*
3SG.NEG-hear-***(PART)** **1SG**
'He didn't hear me.'

Compare the following example from Rapa Nui, in which the genitive preposition seems to be motivated by the negation as well:

(68) Rapa Nui (Austronesian; Kievet 2017: 254)
Kai *toe* *tā'ana* *o* *te* *ika, o* *te* *'ura,*
NEG.PFV remain POSS.3SG.A **GEN** DET fish **GEN** DET lobster
o *te* *kō'iro.*
GEN DET conger_eel
'There was no fish, lobster, or conger eel left for her.'

The partitive prefix *ni-* is used as a discontinuous negation marker in conjunction with the negation marker *-ʷʷna* in nominalized subordinate predicates in Cherokee:

(69) Cherokee (Iroquoian; USA; Montgomery-Anderson 2008: 315)
***ni**-uu-yóosiisk-ʷʷna* *a-ali-stáyvvhvska*
PART-3-hungry.NEG.NMLZ 3A-MID-fix.a.meal.PRS
'He's eating while he's not hungry.'

Thakali requires genitive marking on intransitive subjects and direct objects if the predicate is negated (Georg 1996: 83–84):

(70) Marphatan Thakali (Sino-Tibetan, Bodic; Georg 1996: 84)
ṅa-se *su-e* *a* *mraṅ* *ju.*
1SG-ERG INDEF-GEN NEG see AUX
'I haven't seen anyone.'

Diachronically, negation markers have the tendency to be doubled (and then renewed) by expressions whose original function is emphatic (Jespersen's cycle, cf. van der Auwera 2009). The full Jespersen's cycle specifically with partitives is found in Welsh, where the earlier negation marker *dim* 'none' fused with the partitive preposition *o* to yield the new negation marker *mo* already by the 17th c. (Borsley et al. 2007: 312).

Kuryłowicz (1971) was perhaps the first to propose an explanation for languages such as Polish that require the partitive marking on the object under

predicate negation. He suggested that the original function of the partitive here was emphasis. The indefiniteness meaning yielded by the partitive produced a stronger claim than what would actually be sufficient in the context. Consider the sentences in (71):

(71) *Have you seen the dog with black paws here?*
  a. *No, I haven't seen that dog here.*
  b. *No, I haven't seen any dog here.*

(71b) is a stronger statement than (71a) in that it entails the latter but not vice versa. This is due to the reverse entailments under negation: the weaker the reference, the stronger the statement. If both options are available in the language, the stronger option is typically emphatic in that it provides more information than is actually requested. Indeed, the partitive marking of the object under predicate negation yields emphasis in Ancient Greek:

(72) Ancient Greek (*Aristophanes*, Vesp. 352)
  panta *pephraktai* *k=ouk* *estin* ***opēs***
  all.NOM.PL.N seal.PERF.3SG and=NEG be.3SG hole.**GEN(=PART).SG**
  'Everything is sealed fast; and there is no (single) **hole** (that even a gnat could get through).'

The partitive genitive is by no means obligatory here. Moreover, it does not quantify over the referent of its NP 'hole' such as *'some of the hole/some hole'. The partitive marking yields the emphatic effect: 'there is not a single instance of a hole there', that is, 'there is no hole whatsoever/there aren't any holes here'.

The initial stage at which partitives still feature emphasis is also attested outside of ancient Indo-European languages. Many Bantu languages employ class 16 or 17 partitive (=locative) indexes in marking negation (Devos & van der Auwera 2013; Persohn & Devos 2017: 20). For example, the partitive (=locative) particle *=khwo* in Luhya (Bantu) "serves to reinforce negation" (Persohn & Devos 2017: 20).

The partitive-locative preposition *m* in Ancient Egyptian also adds emphasis to the negation (Winand 2015: 539–540). Likewise, the partitive particle *tuur* of Avava (Austronesian) conveys the emphatic meaning 'at all' when used with the predicate negation (Crowley 2006: 79). Example (73) illustrates the partitive particle *=te* in Apma that conveys an emphatic meaning in negated transitive sentences in Apma but is obligatory with the existential *bibi* 'to be' (Schneider 2010: 127, 168–169; cf. also Crowley 1982: 141 on Paamese; Budd 2014: 555–556):

(73) Apma (Austronesian; Vanuatu; Schneider 2010: 169)
'What did you kill yesterday?'

a. *Na=t=ba* *ih bamte* *abma=nga.*
1SG=PFV=NEG.1 hit make.die something=NEG.2
'I don't kill things.'

b. *Na=t=ba* *ih bamte=**te*** *abma=nga.*
1SG=PFV=NEG.1 hit make.die=**PART** something=NEG.2
'I didn't kill anything.'

I summarize:

(74) Emergence of negation markers from partitives
(i) *partitive induces emphasis* ('at all', '(not) a single', 'any') > (ii) *partitive is obligatory* > (iii) *the former partitive is the only negation marker*

The full development (74.i–iii) is found, for example, in the Modern Welsh negation marker *mo*, which etymologically contains the partitive marker *o*. Most languages discussed above are at stage (74.i) or (74.ii).

8.3 Generalized partitives and emergence of aspectual meanings

Consider the following examples from North Russian and Finnish:

(75) North Russian (Indo-European; Malyševa in Seržant 2015a: 388)
Ja *otvorju* *dverej*
1SG open.FUT.1SG door.**GEN(=PART)**.PL
'I will [**somewhat/partly**] open the door(s).'

(76) Finnish (Finnic, Uralic; Kiparsky 1998)
Hän *avasi* ***ikkunaa***
3SG.NOM opened window.**PART**
a. '(S)he opened the window [**for a while/partly/somewhat**].'
b. '(S)he was opening the window.'

Both partitives are pseudo-partitives in that they reside on the formal means of partitives but do not encode the true-partitive relation. Instead, they encode plain quantification but with the quantifier quantifying the event and not the referent of the hosting NP: in both examples, the partitive marking encodes the quanti-

fier 'some(what)' that quantifies the event and not the host NPs 'door' (72) and 'window' (73) which are affected holistically throughout the process of opening. This quantifier induces the *delimitative* interpretation of the event (see Sasse 2002; Mehlig 2006 for the term) that is sometimes referred to as "partial completion" (cf. Schneider 2010: 167) in both languages, cf. (75) and (76a), while the progressive meaning (76b) is solely available in Finnish. The delimitative meaning 'some(what) / a little bit / for a while' in these examples is typologically the meaning that is most consistently found with aspectually-relevant partitives cross-linguistically.

In some languages, like Finnish (76b), the meaning may even be broader to include also other kinds of non-culminating events such as progressives. For Finnish, it can be said that the partitive encodes actionality (and not aspect in the strict sense of, e.g., Smith 1997), i.e. non-culmination of the event encoded by the verb phrase with the object either bounded (delimitative) or unbounded (progressive). By contrast, the meaning induced by the partitive in North Russian, Russian and Lithuanian is narrower: it is only compatible with the delimitative subtype of non-culminating events, while, e.g., the progressive meaning is ungrammatical (Seržant 2014b: 285; 2015a: 386).

Approximately 10% (13/128) of the marked partitives in my sample develop functions pertaining to the domain of aspectuality. Notably, only those languages in my sample that allow for the pseudo-partitive meaning allow for the interaction with aspectuality. This suggests that the diachronic development of aspectuality-relevant functions presupposes the development of partitives into pseudo-partitives:

(77) The development of aspectuality-relevant functions[12]
(i) *the true-partitive relation* > (ii) + *plain quantification* > (iii) + *aspectuality*

The diachronic mechanism for the development of aspectuality-relevant functions involves a very frequent development. A(dverb)-quantifiers most frequently develop from former D(eterminer) quantifiers (Keenan & Paperno 2012: 948; cf. also Budd 2014: 554–555),[18] cf. the English quantifier *a lot*:

(78) D-quantifier >> A-quantifier
He bought a lot of flowers. >> *He has been buying flowers a lot.*

18 A-quantifier is shortened from A(dverb)-quantifier, i.e. a quantifier that quantifies predicates and patterns morphosyntactically as an adverb, while D(eterminer)-quantifier is a quantifier that quantifies nominal expressions and forms constituency with them (cf. Löbner 1985; Partee 1995).

In the same way, generalized pseudo-partitives which denote indefinite quantity ('some' or 'any') may also undergo the same development by which its D-quantifier 'some' extends to an A-quantifier 'somewhat'.

Note that, in contrast to generalized partitives in North Russian (75) or Finnish (76), the quantifier *a lot* in English changed its linear position in the clause to clause-final, when extending its semantic scope from D-quantification to A-quantification. A change in linear position is less likely with adpositions and case inflection because these are more strongly morphologically integrated into the host NP. In this sense, the development found in North Russian or Finnish is only unusual in that the new A-quantifier is still morphologically integrated within the object NP, while the very semantic extension of a D-quantifier into an A-quantifier is a frequent development cross-linguistically (Keenan & Paperno 2012: 948).

Accordingly, NP-external partitive markers such as a partitive pronoun or a quantifier are more likely to undergo this development (78) because pronouns and quantifiers usually stem from independent words and, therefore, have more positional flexibility at least to begin with. This seems to be the reason for why partitives encoded by adpositions or case inflection within an NP are much less prone to developing aspectuality-related functions than partitive pronouns or quantifiers, cf. Table 6:

Table 6: Different strategies vs. aspectuality-related functions.

	locative	**separative**	**possessive**	**particles (pronouns/quantifiers)**
aspectually relevant	0%	9%	**13%**	**33%**
Irrelevant	100%	91%	**88%**	**67%**

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Indeed, partitive pronouns and quantifiers very often move closer to the verb complex in different languages, not only in French (the partitive pronoun *en*), but also in a number of Austronesian languages of Vanuatu and Micronesia (Budd 2014). For example, the partitive quantifier *tuut* 'some' in Avava is found in its original, postnominal modifier position (79) and in the new, postverbal position (80) (Budd 2014: 553–556), cf.:

(79) Avava (Austronesian; Vanuatu; Budd 2014: 553)

Komat-yan	*mwiniel*	*i*	*moroko-n*	*tuut*	*ier*
1PL.EXC.R-eat	taro	INS	rib-3SG	**some/PART**	PL

'We ate the taro with some of its ribs.'

(80) *I-yan* *tuut* *emer* *ki*
3SG.R-eat **PART** eel DEM
'He ate some of the eel.'

Many other languages of Vanuatu developed aspectuality-related functions, e.g. Apma, Araki, Bierebo, Erromanga, Lewo, and other languages (Early 1994; Budd 2014: 544–545; Schneider 2010: 167–170).[19] Rapa Nui has a verbal degree modifier *'apa* 'somewhat, kind of', cf. (81), which precedes the verb root and stems itself from a noun meaning 'part, portion, piece' (Kieviet 2017: 340).

(81) Rapa Nui (Austronesian; Kieviet 2017: 340)
Ko *'apa* *ora* *'iti* *'ā* *a* *au.*
PRF **PART** live little CONT DET 1SG
'I am somewhat recovered.'

Although it is attached to the verb root it may still quantify the object:

(82) Rapa Nui (Austronesian; Kieviet 2017: 340)
Ko *'apa* *rova'a* *mai* *'ā* *te* *me'e* *pāreherehe* *matā.*
PRF **PART** obtain hither CONT DET thing piece obsidian
'We obtained a few pieces of obsidian.'

Furthermore, a number of Bantu languages developed aspectuality-related functions of partitives which are also related to the meaning of 'somewhat'. Similarly to aspectually-relevant partitives in languages of Vanuatu, in the Bantu language Ruund, the partitive indexes (the locative strategy, the NP-external type) *-p* and *-kù* are partitive markers that may either scope over the object NP, inducing the meaning 'some of' (83), or over the predicate (84) while morphologically they attach to the verb (Nash 1992: 971–972; Persohn & Devos 2017: 17):

(83) Ruund (Bantu; Nash 1992: 972)
ku-ma-landà-p *màsatu*
INF-6(=PL)-buy-16(=PART) three
'to buy three of them'

19 In Apma and Araki, the perfective marker is also homonymous with the partitive marker. If this is not an accident, this is reminiscent of the partitive genitive in Russian and, to some extent in Lithuanian, which typically occurs with the perfective viewpoint only (Seržant 2014a, 2014b).

(84) Ruund (Bantu; Nash 1992: 971)
ku-mw-iimikà-p
INF-1-stop-16(=PART)
'to stop him for a while'

Nearly any accomplishment and even some achievement verbs (such as *to shoot*) interact with generalized partitives in Finnish and other Finnic languages. While the pattern we observe in North Russian or in Finnish in (75) and (76) above is very advanced, other languages attest a more modest degree of semantic extension of the partitive. In other languages, for example in Avava (Austronesian), Standard Russian or in Lithuanian (both Indo-European), the generalized partitive affects the aspectual interpretation of only a small subset of accomplishment verbs confined to incremental-theme verbs such as *to eat* or *to drink*. Somewhat unfamiliar in this context is the English conative construction with *at* (Levin 1993: 6), sometimes with *on* (Levin 1993: 43), which is also based on an incremental-theme verb with a locative marker that induces the meaning of partitivity:

(85) a. *Margaret cut the bread.*
b. *Margaret cut at the bread.*
c. *The mouse nibbled on the bread.*

Incremental-theme verbs establish the isomorphic relation between the quantity of the object and the quantity of the event. They represent a natural bridge between the quantity of the object and the quantity of the verb and are, therefore, in general, natural targets to interact with quantification of the object, including partitives. Incremental-theme verbs are thus diachronically the first predicates that allow for event quantification by partitives (Kiparsky 1998). Accordingly, I suggest the following cline in the development of aspectuality-relevant functions of partitives:

(86) The expansion of partitive quantification in the clause in stages[12]
(i) *NP quantification only* > (ii) *+incremental NP and VP quantification* > (iii) *+VP quantification only*

Furthermore, in addition to the delimitative and non-culminating meanings, partitives sometimes also develop the cessative meaning ('trying to'). This meaning is frequently found in Finnic languages but also elsewhere. Consider the following example from Lewo (87b) in which the partitive marker *re* may not only quantify the object referent (87a) but also the predicate:

(87) Lewo (Austronesian; Oceania; Early 1994: 81)
Ne-sum̃a na sineun sape na-kan re kumpui.
1SG-stayed now 1SG.wanted COMP 1SG-eat **PART** pork
a. 'After a while I wanted to eat a bit of pork.'
b. 'After a while I wanted to **try** eating some pork.'

This cessative meaning is semantically very close to the aspectual, delimitative meaning 'somewhat, a little bit' in that a try often implies a small portion of the event, cf. English *I tried to eat pork* vs. *I ate pork a little bit*.

Finally, the aspectual function of delimitation is often employed for pragmatic purposes such as politeness. This has been reported for Polish (Holvoet 1991: 110), Lithuanian, Belarusian, Russian dialects (Indo-European; Seržant 2015a: 389–390), Finnic languages (Uralic; Larsson 1983), Hidatsa (Siouan; Park 2012: 481), a number of Bantu languages (Persohn & Devos 2017; Halme-Berneking 2017: 147) such as Few (Gunnink 2018: 132, 274) or Bemba:

(88) Bemba (Bantu; Persohn & Devos 2017: 19)
m-pél-é-ní=kó
OBJ1SG-give-IMP-PL=**17LOC(=PART)**
'Give (you all) me, please!'

Here, the pragmatic function of politeness certainly draws on the more basic aspectual function of delimitation, i.e. literally 'give me for a while/a little bit'. The delimitative function softens the request.

8.4 Summarizing the additional meanings of generalized partitives

Above I have demonstrated the mechanisms by which partitives encoding the true-partitive relation develop additional functions: intensionality and hypothetical events (§8.1), affinity to predicate negation (§8.2), and to the aspectuality interpretation of the event (§8.3). Crucially, given that all languages that attest any kind of interaction with negation and/or aspectuality allow for encoding plain quantification (pseudo-partitive) as well, I conclude that these additional functions presuppose the development of the pseudo-partitive use:

(89) Development of predicate-level functions of partitives[12]
true-partitive > + pseudo-partitive > + affinity to predicate negation /
+ aspectual interpretation of the event

The cline in (86) is supported by the quantitative evidence from the database in Table 7:

Table 7: The frequency of related meanings in the database.[20]

The true-partitive relation	**Plain quantification**	**Negation**	**Aspectuality**
100%	**53%** (61/116)	**14%** (16/117)	**12%** (14/116)

Note that not only are there many more partitives that may pattern as pseudo-partitives (encoding plain quantification) but also that all partitives that have negation and/or aspectuality-related functions are found as pseudo-partitives as well (but not vice versa).

Furthermore, the assumption that the development of the pseudo-partitive use by a partitive is the precondition for the negation and aspectuality functions receives additional support. In some languages, quantifiers like 'some' or 'a few' may also become obligatory under negation, while not attesting the true-partitive relation. For example, the verbal markers *-xo* 'some' in Saamia or *-po* 'a bit' in Ndali and Nyakyusa (Atlantic-Congo; Botne et al. 2006: 79–80; Botne 2008: 91ff), *-tei* 'a bit' in Paamese (Austronesian; Crowley 1982: 144) are used as verb-incorporated quantifiers 'some' or 'a bit' and do not attest examples of the true-partitive relation as far as I can tell from the grammars. At the same time, these markers interact with clause negation and/or aspectuality. This evidence supports the claim that the meaning of plain quantification is the prerequisite of negation and aspectuality-related functions and not the original, true-partitive relation.

9 Conclusions

The most frequent development that partitive expressions undergo is the development of the pseudo-partitive usage, resulting from the demise of the Partitivity Constraint, along cline (41) repeated here for convenience as (90) (Koptjevskaja-Tamm 2009: 341; Carlier & Lamiroy 2014: 486; Seržant, forthc.):

(90) Functional change resulting from the demise of the Partitivity Constraint[12]
(a) *true-partitives* > (b) *+faded partitives* > (c) *+pseudo-partitives*

20 Note that partitives encoded by the zero strategy are excluded from these counts.

Thus, the co-expression of the true-partitive relation and of plain quantification by the same partitive construction cross-linguistically is the most frequent co-expression pattern in the domain of partitives: 53% (61/116) of all non-zero strategies to encode the true-partitive relation in my sample allow for the plain-quantification meaning as well. The frequency of co-expression does not entail, of course, the direction of change itself. However, I have presented diachronic evidence in favour of the change from partitives expressing the true-partitive relation only into pseudo-partitives. Thus, I claim that (90) is true for all partitives that stem from an adpositional strategy, that is, the locative, separative, and possessive strategies, including possessive indexes. Moreover, along with the semantic extension in (90), there is also the development towards reduction of the syntactic structure as in (46), repeated in (91) for convenience:

(91) Reduction of the syntactic structure along with the development into generalized partitive and then into pseudo-partitive
(i) *[NP1] adposition [NP2]* > (ii) *adposition [NP1]* > (iii) *determiner [NP]* > (iv) *ø [NP]*

This indicates that partitives that are only capable of expressing the true-partitive relation are not semantically and syntactically stable cross-linguistically. Indeed, languages for which there is a historical record attest recurrent renewals of partitives.

By contrast, existential quantifiers sometimes undergo the reverse change: from encoding only plain quantification into a marker of the true-partitive relation. For example, it can be said that English does have a partitive quantifier that developed out of an existential, indefinite quantifier, namely, stressed *SOME* (as opposed to the unstressed *s'm*). However, the situation is not entirely clear, since it might be an effect of the stress which creates alternatives (Klaus von Heusinger, p.c.).

Furthermore, while the true-partitive relation requires two referents – the subset and the superset referent – many languages develop generalized partitive constructions that only consist of a single NP. The motivation behind this is the strong frequency bias of true-partitives towards indefiniteness (of the subset quantifier). This frequency bias leads to a more efficient coding, which, in turn, allows speakers to minimize their production effort with no concomitant information loss. In other words, if the meaning of the subset quantifier is always indefinite existential, there is no need to encode the quantifier since this meaning will be understood anyway. The conventionalization of quantifier drop proceeds along the following steps in (33), repeated here as (92) for convenience:

(92) Intermediate stages in the emergence of generalized partitives (Seržant 2015: 148)
explicit quantifier > elliptical, implicit subset with traces in morphosyntax > no traces of the quantifier

As a consequence, generalized partitives often develop away from the respective partitives with an explicit quantifier. For example, generalized partitives may enter the domain of argument marking of the verb, such as in terms of differential argument marking (cf. Witzlack-Makarevich & Seržant 2018: 15–16) along the cline in (37), repeated here as (93) for convenience:

(93) Expansion of generalized pseudo-partitives across grammatical roles[12]
(i) *direct objects only* > (ii) + *existential, inactive subjects* > (iii) + *some transitive subjects*

Once generalized partitives develop the ability to express plain quantification and thus pattern as generalized pseudo-partitives, they may start interacting with the predicate in such domains as aspectuality, negation or intensional and hypothetical predication and may be conventionalized as markers (co-)expressing particular functions in these domains. For example, partitives often take part in Jespersen's cycle by developing into discontinuous predicate negation or double negation markers (e.g. in Lithuanian, Polish, Estonian, Paamese, Lewo, Lamen, Raga, or Cherokee).

Likewise, generalized pseudo-partitives may enter the domain of aspectuality. For example, Finnic languages – unlike many European languages (cf. English *to eat* vs. *to eat up*) – do not have means to morphologically distinguish between non-culminating and culminating accomplishments. The partitive case-marking of the object may be employed for this purpose here: a predicate with a partitive-case-marked direct object is always non-culminating. I have argued – building on Kiparsky (1998) – that the expansion of partitives in this domain typically runs along the scale in (86) (repeated as (94) for convenience):

(94) The expansion of partitive quantification in the clause in stages[12]
(i) *NP quantification only* > (ii) *+NP and VP quantification* > (iii) *+VP quantification only*

Crucially, in order to develop aspectuality or negation-related functions, generalized partitives must first undergo the development into pseudo-partitives.

References

Aiton, Grant. 2014. Grammatical relations and information structure in Eibela: a typological perspective. *Language and Linguistics in Melanesia* 32(2). 1–25.

Aiton, Grant. 2016. *Grammatical relations and information structure in Eibela: A typological perspective*. Townsville: James Cook University doctoral dissertation.

Alho, Irja H. 1992. Distinguishing kind and set in Finnish. *Studies in the Linguistic Science* 22(1). 1–14.

Ambrazas, Vytautas (ed.). 2006. *Dabartinės lietuvių kalbos gramatika* [A grammar of Modern Lithuanian]. Vilnius: Lietuvių kalbos institutas.

Anderson, Gregory D. & David K. Harrison. 1999. *Tyvan* (Languages of the World/Materials 257). München: Lincom.

Arys-Djanaïéva, Lora. 2004. *Parlons Ossète* (Collection Parlons). Paris: L'Harmattan.

Atoyebi, Joseph Dele. 2010. *A reference grammar of Oko: A West Benue-Congo language of North-Central Nigeria* (Grammatical Analysis of Africans Languages 37). Köln: Rüdiger Köppe.

Authier, Gilles. 2009. *Grammaire kryz: Langue caucasique d'Azerbaïdjan, dialecte d'Alik*. Paris: Peeters.

Auwera, Johan van der. 2009. The Jespersen Cycles. In Elly van Gelderen (ed.), *Cyclical change*, 35–71. Amsterdam: Benjamins.

Bagaev, N. K. 1965. *Sovremennyj osetinskij jazyk*. Ordžonikidze: Severo-osetinskoe knižnoe izdatel'stvo.

Barchas-Lichtenstein, Jena. 2012. Garifuna Quantification. In Edward L. Keenan & Denis Paperno (eds.), *Handbook of quantifiers in natural language*, 165–226. Dordrecht: Springer.

Barwise, Jon & Robin Cooper. 1981. Generalized quantifiers and natural language. *Linguistics and Philosophy* 4. 159–219.

Borschev, Vladimir, Elena V. Paducheva, Barbara H. Partee, Yakov G. Testelets & Igor Yanovich. 2007. Russian genitives, non-referentiality, and the property-type hypothesis. In Andrei Antonenko, John F. Bailyn & Christina Y. Bethin (eds.), *Formal approaches to Slavic linguistics: The Stony Brook Meeting 2007* (FASL 16). Ann Arbor: Michigan Slavic Publishers.

Borsley, Robert D., Maggie Tallerman & David Willis. 2007. *The syntax of Welsh* (Cambridge Syntax Guides). Cambridge: Cambridge University Press.

Botne, Robert, Ochwada Hannington & Michael R. Marlo. 2006. *A grammatical sketch of the Lusaamia verb* (Grammatikalische Analysen afrikanischer Sprachen 30). Köln: Rüdiger Köppe.

Botne, Robert. 2008. *A grammatical sketch of Chindali: Malawian variety* (Lightning Rod Press Series 2). Philadelphia: American Philosophical Society.

Budd, Peter. 2014. Partitives in Oceanic languages. In Silvia Luraghi & Tuomas Huumo (eds.), *Partitive cases and related categories* (Empirical Approaches to Language Typology 54), 523–562. Berlin & Boston: De Gruyter Mouton.

Cardinaletti, Anna & Giuliana Giusti. 2015. Cartography and optional feature realization in the nominal expression, beyond functional sequence. In Guglielmo Cinque & Luigi Rizzi (eds.), *The cartography of syntactic structures*, vol. 10, 151–172. Oxford UK & New York: Oxford University Press.

Carlier, Anne & Béatrice Lamiroy. 2014. The grammaticalization of the prepositional partitive in Romance. In Silvia Luraghi & Tuomas Huumo (eds.), *Partitive cases and related categories* (Empirical Approaches to Language Typology 54), 477–522. Berlin & Boston: De Gruyter Mouton.

Casad, Eugene H. 1984. Cora. In Ronald W. Langacker (ed.), *Studies in Uto-Aztecan grammar 4: Southern Uto-Aztecan grammatical sketches,* 153–459. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

Comrie, Bernard. 1981: *Language universals and linguistic typology: Syntax and morphology*. Chicago: University of Chicago Press.

Comrie, Bernard. 1989. Some general properties of reference-tracking systems. In Doug Arnold, Martin Atkinson, Jacques Durand, Claire Grover & Louisa Sadler (eds.), *Essays on grammatical theory and universal grammar*, 37–51. Oxford: Clarendon.

Croft, William. 1988. Agreement vs. case marking and direct objects. In Michael Barlow & Charles A. Ferguson (eds.), *Agreement in natural language: Approaches, theories, descriptions*. Stanford: CSLI.

Crowley, Terry. 1982. *The Paamese language of Vanuatu* (Pacific Linguistics, Series B 87). Canberra: Research School of Pacific and Asian Studies. Australian National University.

Cruse, Alan. 2000. *Meaning in language: An introduction to semantics and pragmatics*. Oxford: Oxford University Press.

Dahl, Eystein. 2014. Partitive subjects and objects in Indo-Iranian and beyond. In Silvia Luraghi & Tuomas Huumo (eds.), *Partitive cases and related categories* (Empirical Approaches to Language Typology 54), 417–442. Berlin & Boston: De Gruyter Mouton.

Dombrowsky-Hahn, Klaudia. 2015. *A grammar of Syer (Western Karaboro, Senufo): Phonology, morphology, argument realization* (Gur Monographs 12). Köln: Rüdiger Köppe.

Dowty, David & Belinda Brodie. 1984. The semantics of "floated" quantifiers in a transformationless grammar. *Proceedings of the West Coast Conference on Formal Linguistics* 3. 75–90. CSLI Publications.

Du Bois, John. 1987. The discourse basis of ergativity. *Language* 63. 805–852.

Dum-Tragut, Jasmine. 2009. *Armenian: Modern Eastern Armenian*. Amsterdam: John Benjamins.

Early, Robert J. 1994. *A grammar of Lewo, Vanuatu*. Canberra: Australian National University dissertation.

Enç, Murvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22(1). 1–25.

Endzelīns, Jānis. 1951. *Latviešu valodas gramatika* [Grammar of the Latvian language]. Riga: Latvijas valsts izdevniecība.

Enrico, John. 2003. *Haida syntax* (Studies in the Anthropology of North American Indians). 2 vols. Lincoln: University of Nebraska Press.

Erdal, Marcel. 2004. *A grammar of Old Turkic*. Leiden & Boston: Brill.

Etxeberria, Urtzi. 2021, this volume. The partitive marker in Basque and its relation to bare nouns and the definite article. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.

Frajzyngier, Zygmunt. 2002. *A grammar of Hdi* (Mouton Grammar Library 21). Berlin & New York: Mouton de Gruyter.

François, Alexandre. 2002. *Araki: A disappearing language of Vanuatu* (Pacific Linguistics 522). Canberra: Research School of Pacific and Asian Studies. Australian National University.

Georg, Stefan. 1996. *Marphatan Thakali: Untersuchungen zur Sprache des Dorfes Marpha im Oberen Kāli-Ganṇḍaki-Tal/Nepal* (LINCOM Studies in Asian Linguistics 02). München: Lincom.

Giusti, Giuliana & Petra Sleeman. 2021, this volume. Partitive elements in the languages of Europe. An advancement in the understanding of a multifaceted phenomenon. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.
Givón, Talmy. 2001. *Syntax*, vol. 2. Amsterdam & Philadelphia: John Benjamins.
Glaser, Elvira. 1992. Umbau partitiver Strukturen in der Geschichte des Deutschen. *Sprachwissenschaft* 17(2). 113–132.
Gunnink, Hilde. 2018. *A grammar of Fwe: A Bantu language of Zambia and Namibia*. Ghent: University of Ghent dissertation.
Halme-Berneking, Riikka. 2017. Oshikwanyama locative enclitics (and their non-locative functions). *Africana Linguistica* 23. 137–150.
Haspelmath, Martin. 2008a. Frequency vs. iconicity in explaining grammatical asymmetries. *Cognitive Linguistics* 19(1). 1–33.
Haspelmath, Martin. 2008b. Creating economical patterns in language change. In Jeff Good (ed.), *Linguistic universals and language change,* 185–214. Oxford: Oxford University Press.
Haspelmath, Martin. 2008c. A frequentist explanation of some universals of reflexive marking. *Linguistic Discovery* 6(1). 40–63.
Haspelmath, Martin. 2011. On S, A, P, T, and R as comparative concepts for alignment typology. *Linguistic Typology* 15(3). 535–567.
Heath, Jeffrey. 2008. *A grammar of Jamsay* (Mouton Grammar Library 45). Berlin: Mouton de Gruyter.
Heath, Jeffrey. 2015. *A grammar of Togo Kan (Dogon language Family, Mali)*. University of Michigan. Draft Ms, July 2015.
Heusinger, Klaus von. 2002. Specificity and definiteness in sentence and discourse structure. *Journal of Semantics* 19(3). 245–274.
Heusinger, Klaus von & Jaklin Kornfilt. 2017. Partitivity and case marking in Turkish and related languages. *Glossa* 2(1). 1–40.
Hill, Jane H. & Kenneth C. Hill. 1986. *Speaking Mexicano: Dynamics of syncretic language in Central Mexico*. Tucson, AZ: University of Arizona Press.
Hober, Nicole. forthcoming. On the intrusion of the Spanish preposition *de* into the languages of Mexico. *Journal of Language Contact*.
Hoeksema, Jacob. 1996. Introduction. In Jacob Hoeksema (ed.), *Partitives: Studies on the syntax and semantics of partitive and related constructions* (Groningen-Amsterdam Studies in Semantics 14), 2–24. Berlin & New York: Mouton de Gruyter.
Hofling, Charles Andrew & Félix Fernando Tesucún. 2000. *Itzaj Maya grammar.* Salt Lake City: University of Utah Press.
Hofstede, Antje Ida. 1998. *Syntax of Jibbāli.* Manchester: University of Manchester doctoral dissertation.
Holvoet, Axel. 1991. *Transitivitiy and clause structure in Polish: A study in case marking*. Warszawa: Slawistyczny Osrodek Wydawniczy.
Hoop, Helen de. 1997. A semantic reanalysis of the partitive constraint. *Lingua* 103(2/3). 151–174.
Hoop, Helen de. 2003. Partitivity. In Lisa Cheng & Rint Sybesma (eds.), *The second Glot international state-of-the-article book*. Berlin & New York: Mouton De Gruyter.
Horton, A. E. 1949. *A grammar of Luvale.* Johannesburg: Witwatersrand University Press.
Huumo, Tuomas. 2018. The partitive A: On uses of the Finnish partitive subject in transitive clauses. In Ilja A. Seržant & Alena Witzlack-Makarevich (eds.), *Diachrony of differential*

argument marking (Studies in Diversity Linguistics), 383–411. Berlin: Language Science Press.

Huumo, Tuomas. 2021, this volume. Longitudinal or transverse? How the unbounded quantity expressed by the Finnish partitive case relates to time. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.

Ihsane, Tabea. 2013. EN pronominalisation in French and the structure of nominal expressions. *Syntax* 16(3). 217–249.

Ionin, Tania, Ora Matushansky & Eddy G. Ruys. 2006. Parts of speech: Towards a unified semantics for partitives. In Christopher Davis, Amy Rose Deal & Youri Zabbal (eds.), *Proceedings of NELS* 36, 357–370. Amherst: University of Massachusetts.

Itkonen, E. 1972. Über das Objekt in den finnisch-wolgaischen Sprachen. *Finnisch-ugrische Forschungen* 39. 153–213.

Jackendoff, Ray. 1977. *X-bar syntax: A study of phrase structure.* Cambridge, MA: MIT Press.

Keenan, Edward L. & Denis Paperno. 2012. Overview. In Edward L. Keenan & Denis Paperno (eds.), *Handbook of quantifiers in natural language*, 941–950. Dordrecht: Springer.

Khalilova, Zaira. 2009. *A grammar of Khwarshi*. Leiden: Rijksuniversiteit te Leiden doctoral dissertation.

Kibrik, Aleksandr E. 1977. *Arčinskij jazyk: Teksty i slovari* (Publikacii otdelenija strukturnoj i prikladnoj lingvistiki 14). Moscow: Izdatel'stvo Moskovskogo Universiteta.

Kieviet, Paulus. 2017. *A grammar of Rapa Nui*. Berlin: Language Science Press.

Kiparsky, Paul. 1998. Partitive case and aspect. In Miriam Butt & Wilhem Geuder (eds.), *The projection of arguments: Lexical and compositional factors* (CSLI Lecture Notes 83), 265–307. Stanford: CSLI Publications.

Klenin, Emily. 1983. *Animacy in Russian: A new interpretation*. Columbus, Ohio: Slavica Publishers, Inc.

Kont, Karl. 1963. *Käändsõnaline objekt läänemeresoome keeltes.* Keele ja kirjanduse instituudi uurimused IX. Tallinn: Eesti NSV Teaduste Akad.

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.), *The Circum-Baltic languages: Typology and contact*, vol. 2: *Grammar and typology* (Studies in Language Companion Series), 523–568. Amsterdam & Philadelphia: John Benjamins.

Koptjevskaja-Tamm, Maria. 2009. "A lot of grammar with a good portion of lexicon": towards a typology of partitive and pseudopartitive nominal constructions. In Johannes Helmbrecht, Yoko Nishina, Yong-Min Shin, Stavros Skopeteas & Elisabeth Verhoeven (eds.), *Form and function in language research: Papers in honour of Christian Lehmann*, 329–346. Berlin & New York: Mouton de Gruyter.

Koptjevskaja-Tamm, Maria & Bernhard Wälchli. 2001. The Circum-Baltic languages: An areal-typological approach. In Östen Dahl & Maria Koptjevskaja-Tamm (eds.), *The Circum-Baltic languages: Typology and contact,* vol. 2: *Grammar and typology* (Studies in Language Companion Series), 615–750. Amsterdam & Philadelphia: John Benjamins.

Kornfilt, Jaklin. 1996. Naked partitive phrases in Turkish. In Jacob Hoeksema (ed.), *Partitives: Studies on the syntax and semantics of partitive and related construction*, 107–142. Berlin & New York: Mouton de Gruyter.

Kossmann, Maarten G. 2000. *Esquisse grammaticale du rifain oriental* (Publ. de la SELAF, Société des Etudes Linguistiques et Anthropologiques de France 387). Leuven: Peeters.

Krys'ko, Vadim B. 1994. *Razvitie kategorii oduševlennosti v istorii russkogo jazyka.* Moskva: Lyceum.
Krys'ko, Vadim B. 1997. *Istoričeskij sintaksis russkogo jazyka. Ob"ekt i perechodnost'.* Moskva: Azbukovnik.
Krys'ko, Vadim B. 2006. *Istoričeskij sintaksis russkogo jazyka. Ob"ekt i perechodnost'.* 2-e izdanie, ispravlennoe i dopolnennoe. Moskva: Azbukovnik.
Kuryłowicz, Jerzy. 1964. *The inflectional categories of Indo-European.* Heidelberg: Carl Winter Universitätsverlag.
Kuryłowicz, Jerzy. 1971. Słowiański genetivus po negacij. In Stanisław Urbańczyk (ed.), *Sesja naukowa międzynarodowej komisji budowy gramatycznej języków słowiańskich: w Krakowie w dniach 3–5 grudnia 1969*, 11–14. Wrozław: Zakład Narodowy im. Ossolińskich.
Ladusaw, William A. 1982. Semantic constraints on the English partitive construction. In Daniel P. Flickinger, Marlys Macken & Nancy Wiegand (eds.), *Proceedings of the First West Coast Conference on Formal Linguistics* (WCCFL 1), 231–242. Stanford, CA: Stanford Linguistics Association.
Lagae, Véronique. 2001. Le pronom *en*: des compléments adnominaux aux syntagmes quantificateurs, *Travaux de Linguistique* 2001/1-2 (42–43), 43–57.
Lamberti, Marcello & Roberto Sottile. 1997. *The Wolaytta language* (Studia Linguarum Africae Orientalis 6). Köln: Rüdiger Köppe.
Larjavaara, Matti. 1991. Aspektuaalisen objektin synty [The origin of the aspectual object]. *Virittäjä* 95. 372–408.
Larsson, Lars-Gunnar. 1983. *Studien zum Partitivgebrauch in den ostseefinnischen Sprachen* (Acta Universitatis Upsaliensis 15). Uppsala: Borgströms Tryckeri AB.
Leer, Jeffry A. 1991. *The schetic categories of the Tlingit verb.* Chicago, Ill.: University of Chicago doctoral dissertation.
Lees, Aet. 2004. Partitive-accusative alternations in Balto-Finnic languages. In Christo Moskovsky (ed.), *Proceedings of the 2003 Conference of the Australian Linguistics Society.*
Levin, Beth. 1993. *English verb classes and alternations: A preliminary investigation.* Chicago: University of Chicago Press.
Löbner, Sebastian. 1985. Natürlichsprachliche Quantoren: Zur Verallgemeinerung des Begriffs der Quantifikation. *Studium Linguistik* 17/18. 79–113.
López, Borja Ariztimuño. 2014. The origin of the Basque partitive. In Silvia Luraghi & Tuomas Huumo (eds.), *Partitive cases and related categories* (Empirical Approaches to Language Typology 54), 323–346. Berlin & Boston: De Gruyter Mouton.
Luraghi, Silvia & Seppo Kittilä. 2014. Typology and diachrony of partitive case markers. In Silvia Luraghi & Tuomas Huumo (eds.), *Partitive cases and related categories.* (Empirical Approaches to Language Typology, 54), 17–62. Berlin & Boston: De Gruyter Mouton.
Lytkin, Vasilij Il'ič & Klara Jevgen'evna Majtinskaja. 1975. *Osnovy finno-ugorskogo jazykoznanija: Pribaltijsko-finskie, saamskie i mordovskie jazyki.* Moscow: Nauka.
Malchukov, Andrej. 2015. Valency classes and alternations: parameters of variation. In Andrej Malchukov & Bernard Comrie (eds.), *Valency classes in the world's languages*, vols. 1–2, 73–130. Berlin & Boston: De Gruyter Mouton.
Markus, E. B. & F. I. Rožanskij. 2011. *Sovremennyj vodskij jazyk: Teksty i grammatičeskij očerk.* tom II. St. Petersburg: Nestor-Istorija.
Mehlig, Hans Robert [Melig, Chans Robert]. 2006. Glagol'nyj vid i vtoričnaja gomogenizacija oboznačaemoj situacii: K upotrebleniju delimitativnogo sposoba dejstvija v russkom

jazyke. In Volkmar Lehmann (ed.), *Glagol'nyj vid i leksikografija: Semantika i struktura slavjanskogo vida* 4, 235–276. München: Otto Sagner.
Miestamo, Matti. 2014. Partitives and negation: a cross-linguistic survey. In Silvia Luraghi & Tuomas Huumo (eds.), *Partitive cases and related categories* (Empirical Approaches to Language Typology 54), 63–86. Berlin & Boston: De Gruyter Mouton.
Montgomery-Anderson, Brad. 2008. *A reference grammar of Oklahoma Cherokee*. Lawrence, KS: University of Kansas dissertation.
Moravcsik, Edith A. 1978. On the distribution of ergative and accusative patterns. *Lingua* 45(1). 233–279.
Nachmanson, Ernst. 1942. *Partitives Subjekt im Griechischen*. Göteborg: Wettergren & Kerbers.
Næss, Åshild. 2007. *Prototypical transitivity* (Typological Studies in Language 72). Amsterdam & Philadelphia: John Benjamins.
Nau, Nicole. 2014. Differential object marking in Latgalian. In Axel Holvoet & Nicole Nau (eds.), *Grammatical relations and their non-canonical encoding in Baltic* (Valency, Argument Realization and Grammatical Relations in Baltic 1), 207–255. Amsterdam & Philadelphia: John Benjamins.
Neidle, Carol. 1988. *The role of case in Russian syntax* (Studies in Natural Language and Linguistic Theory 10). Dordrecht: Kluwer.
Nevskaya, Irina. 2017. Innovations and archaisms in Siberian Turkic spatial case paradigms: A Transeurasian historical and areal perspective. In Martine Robbeets & Walter Bisang (eds.), *Paradigm change in the Transeurasian languages and beyond* (Studies in Language Companion Series 161), 257–286. Amsterdam: John Benjamins.
Park, Indrek. 2012. *A grammar of Hidatsa*. Bloomington: Indiana University doctoral dissertation.
Partee, Barbara H. 1995. Quantificational structures and compositionality. In Emmon Bach, Eloise Jelinek, Angelika Kratzer & Barbara H. Partee (eds.), *Quantification in natural languages*, 541–601. Dordrecht: Kluwer Academic Publishers.
Partee, Barbara H. 2008. Negation, intensionality, and aspect: Interaction with NP semantics. In Susan Rothstein (ed.), *Theoretical and crosslinguistic approaches to the semantics of aspect* (Linguistik Aktuell/ Linguistics Today 110), 291–317. Amsterdam: John Benjamins.
Persohn, Bastian. 2017. Locative and extra-locative clitics in Nyakyusa, *Africana Linguistica* 23. 151–165.
Persohn, Bastian & Maud Devos. 2017. Post-final locatives in Bantu: Axes of variation and non-locative functions. *Africana Linguistica* 23. 3–46.
Philippa, Marlies, Frans Debrabandere, Arend Quak, Tanneke Schoonheim & Nicoline van der Sijs. 2003. *Etymologisch woordenboek van het Nederlands*, deel 1. Amsterdam: Amsterdam University Press. http://etymologiebank.nl
Quine, Willard Van Orman. 1960. *Word and object*. Cambridge MA: The MIT Press.
Reed, A. M. 1989. Discourse groups and semantic groups. In Joyce Powers & Kenneth de Jong (eds.), *Proceedings of the 5th Eastern States Conference on Linguistics* (ESCOL'88), 416–427. Columbus, Ohio: Ohio State University Press.
Sands, Krishna & Lyle Campbell. 2001. Non-canonical subjects and objects in Finnish. In Alexandra Y. Aikhenvald, Robert M.W. Dixon & Masayuki Onishi (eds.), *Non-canonical marking of subjects and objects*. Amsterdam: John Benjamins.
Sasse, Hans-Jürgen. 2002. Recent activity in the theory of aspect: Accomplishments, achievements, or just non-progressive state? *Linguistic Typology* 6. 199–271.

Selkirk, Elisabeth O. 1977. Some remarks on noun phrase structure. In Peter W. Culicover, Thomas Wasow & Adrian Akmajian (eds.), *Formal Syntax: Proceedings of the 1976 MSSB-UC Irvine Conference on the Formal Syntax of Natural Language*, *June 9–11, 1976, Newport Beach*, *California*, 285–316. New York: Academic Press.

Schneider, Cynthia. 2010. *A grammar of Abma: A language of Pentecost island, Vanuatu*. Canberra: Pacific Linguistics.

Schwyzer, Eduard & Albert Debrunner. 1950. *Griechische Grammatik:* Auf der Grundlage von Karl Brugmanns Griechische Grammatik. Zweiter Band: *Syntax und syntaktische Stilistik.* Vervollständigt und herausgegeben von Albert Debrunner. München: C. H. Beck'sche Verlagsbuchhandlung.

Seržant, Ilja A. 2012. Morphosyntactic properties of the partitive genitive in Ancient Greek. *Indogermanische Forschungen* 117. 187–204.

Seržant, Ilja A. 2013. The diachronic typology of non-canonical subjects. In Ilja A. Seržant & Leonid Kulikov (eds.), *The diachrony of non-canonical subjects* (SLCS 140), 313–360. Amsterdam & Philadelphia: John Benjamins.

Seržant, Ilja A. 2014a. Denotational properties of the independent partitive genitive in Lithuanian. In Axel Holvoet & Nicole Nau (eds.), *Grammatical relations and their non-canonical encoding in Baltic* (Valency, Argument Realization and Grammatical Relations in Baltic 1), 257–299. Amsterdam & Philadelphia: John Benjamins.

Seržant, Ilja A. 2014b. The independent partitive genitive in North Russian. In Ilja A. Seržant & Björn Wiemer (eds.), *Contemporary approaches to dialectology: The area of North, Northwest Russian and Belarusian vernaculars* (Slavica Bergensia 13), 270–329. Bergen: John Grieg AS.

Seržant, Ilja A. 2015a. Independent partitive as a Circum-Baltic isogloss. *Journal of Language Contact* 8. 341–418.

Seržant, Ilja A. 2015b. An approach to syntactic reconstruction. In Carlotta Vitti (ed.), *Perspectives on historical syntax,* 117–154. Amsterdam & Philadelphia: John Benjamins.

Seržant, Ilja A. 2020. Dataset for the paper "Typology of partitives", Linguistics. [Data set]. Zenodo. https://doi.org/10.5281/zenodo.4277624

Seržant, Ilja A. forthcoming. Typology of partitives. *Linguistics*. ahead-of-print.

Seržant, Ilja A., Katarzyna Janic, Darja Dermaku & Oneg Ben Dror. forthcoming. Typology of coding patterns and frequency effects of antipassives. *Studies in Language*. aop.

Sleeman, Petra & Tabea Ihsane. 2021, this volume. The L2 acquisition of the partitive pronoun *en* in French by L1 speakers of German and the role of the L1. In Petra Sleeman & Giuliana Giusti (eds.), *Partitive determiners, Partitive pronouns and partitive case* (Linguistische Arbeiten 580). Berlin: de Gruyter.

Smeets, Ineke. 2008. *A grammar of Mapuche* (Mouton Grammar Library 41.) Berlin: Mouton de Gruyter.

Smith, Carlotta. 1997. *The parameter of aspect (Second edition)* (Studies in Linguistics and Philosophy 43). Berlin: Springer.

Strobel, Thomas & Elvira Glaser. 2019. The rise and fall of partitive markers in some Germanic varieties. In Tabea Ihsane (ed.), *Disentangling bare nouns and nominals introduced by a partitive article*, 17–53. Leiden: Brill.

Tamm, Anne. 2006. Estonian transitive verbs and object case. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG06 Conference*, 484–504. University of Konstanz: CSLI Publications. http://csli-publications.stanford.edu/

Terrill, Angela. 2003. *A grammar of Lavukaleve* (Mouton Grammar Library 30.) Berlin & Boston: Mouton de Gruyter.

Tveite, Tor. 2004. *The case of the object in Livonian: A corpus based study.* Helsinki: University of Helsinki MA thesis.

Ubrjatova, Elizaveta Ivanovna. 1985. *Jazyk noril'skich dolgan*. Novosibirsk: Nauka.

Ubrjatova, Elizaveta I., L.N. Charitonov & N.E. Petrov. 1982. *Grammatika sovremennogo jakutskogo literaturnogo jazyka: Fonetika i morfologija*. Moscow: Izdatel'stvo Nauka.

Vari-Bogiri, Hannah. 2011. *Phonology and morpho-syntax of Raga, Vanuatu.* Port Vila: University of the South Pacific doctoral dissertation.

Westerståhl, Dag. 1985. Determiners and context sets. In Alice ter Meulen & Johan van Benthem (eds.), *Generalized quantifiers in natural language*, 45–71. Dordrecht: Foris.

Winand, Jean. 2015. The oblique expression of the object in Ancient Egyptian. In Eitan Grossman, Martin Haspelmath & Tonio Sebastian Richter (eds.), *Egyptian-Coptic linguistics in typological perspective,* 533–560. Berlin & Munich & Boston: De Gruyter Mouton.

Witzlack-Makarevich, Alena & Ilja A. Seržant. 2017. Differential argument marking: Patterns of variation. In Ilja A. Seržant & Alena Witzlack-Makarevich (eds.), *Diachrony of differential argument marking* (Studies in Diversity Linguistics), 1–40. Berlin: Language Science Press. http://langsci-press.org/

Zimmermann, Thomas Ede. 1993. On the proper treatment of opacity in certain verbs. *Natural Language Semantics* 1. 149–179.