

Partitives and negation: A cross-linguistic survey

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Abstract

The partitive of negation, i.e. partitive marking of NPs under the scope of negation, is known to be found in some European languages, namely Finnic, Baltic, Slavic and Basque. Based on an extensive and representative language sample, this typological study surveys the cross-linguistic distribution of the partitive of negation and other asymmetries between affirmatives and negatives in the marking of noun phrases. Instances of the partitive of negation realized as part of a case marking system are not found outside the European languages mentioned. Nonetheless, negation is found to affect the use of articles and other determiners, e.g., in Polynesian languages and in French, as well as the use of class markers, e.g., in some Bantu languages, in which the class markers in question actually function as determiners. Effects on focus marking and alignment are also observed in some languages. There is a pragmatically motivated tendency for an indefinite noun phrase to have a non-referential reading under the scope of negation. The grammatical effects of negation on the use of articles and determiners, including class markers, result in marking the noun phrases as non-referential and are thus motivated by the connection between negation and non-referentiality. It is further argued that partitives, too, contribute to marking noun phrases as non-referential, and the partitive of negation can thus be seen as arising from similar motivations.

Keywords: negation, partitive, case marking, determiners, referentiality

1. Introduction

In some European languages – Finnic, Baltic, Slavic and Basque – noun phrases in the scope of negation are marked, either obligatorily or as a matter of preference, with a case that has a partitive-marking function (partitive or genitive). In this paper, the phenomenon will be referred to as the partitive of negation. Although the link between partitives and negation is relatively well-studied in these European languages, it has not been systematically addressed in typological research. Related phenomena have been reported in some language groups outside Europe, e.g., in some Oceanic languages, but

their cross-linguistic distribution is not known. The present paper aims to fill this gap. It will report the results of a large-scale typological survey of the partitive of negation and related effects of negation on the marking of grammatical categories in noun phrases. In a larger context, the effects of negation on noun phrases are one of the many ways in which negation can affect the structure of clauses, or in Miestamo's (2005) terms, one of the many ways in which negatives can show structural asymmetry vis-à-vis affirmatives. This larger context becomes relevant when we start looking for explanations for the link between partitives and negation. In the literature, it has been attributed to semantic and pragmatic factors, such as quantification, referentiality/specificity and aspect (cf., e.g., Krasovitsky et al. 2010).

The remainder of this introduction gives a short presentation of the phenomenon as we know it from familiar European languages. Section 2 discusses the methodology followed in the typological survey, while Section 3 presents the results. Section 4 discusses the cross-linguistic findings in a functional perspective and concludes the paper.

The following examples (1) give a preliminary illustration of the case alternations in Finnish.

(1) Finnish (constructed examples)¹

- a. *söin* *banaani-n*
eat.PST.1SG banana-GEN
'I ate {a/the} banana.'
- b. *söin* *banaani-a*
eat.PST.1SG banana-PAR
'I {ate some / was eating {a/the}} banana.'
- c. *en* *syönyt* *banaani-a*
NEG.1SG eat.PST.PTCP banana-PAR
'I {didn't eat / wasn't eating} {a/the} banana.'

In the affirmative, a distinction between total and partial objects² can be made using different case forms – the total object is marked by genitive³ case as in (1a) and the

¹ The abbreviations used in the glosses are listed in the beginning of the collective volume.

² The terms total and partial object are used here, but as already pointed out above, quantification is only one factor determining their use, others being, e.g., aspectuality and referentiality.

³ Traditionally this form in this function has been called accusative despite the fact that it is formally identical to the genitive; only personal pronouns and the pronoun 'who' have separate accusative forms. In this article I will adopt the usage in the most up-to-date and comprehensive grammar of Finnish (Hakulinen et al. 2004: 108) and restrict the term accusative to the separate accusative forms of pronouns.

partial object by partitive case as in (1b). In the negative (1c) only the partitive can be used and the distinction between total and partial objects is lost.

In a similar way, in a number of European languages, noun phrases in the scope of negation are marked by a case that has partitive semantics. These languages include Finnish and Estonian (Finnic); Lithuanian, and to some extent also Latvian (Baltic); Russian, Ukrainian, Polish (Slavic); and Basque. In the Baltic and Slavic languages mentioned, the case with partitive functions involved in the alternation is the genitive. With the exception of Basque, these languages belong to the Circum-Baltic languages as defined by Dahl and Koptjevskaja Tamm (2001: xviii–xix). According to Koptjevskaja Tamm and Wälchli (2001: 663), case alternations between total and partial objects (usually involving the partitive of negation) are also found in older stages of Indo-European languages, e.g., Classical Greek, Sanskrit, Gothic, Old High German and Middle Low German, total objects being marked by the accusative and partial objects by the genitive.

The partitive of negation has been studied quite extensively in many of the European languages in which it occurs. For Russian, for example, there is a separate bibliography devoted to the partitive (= genitive) of negation (Corbett 1986). Koptjevskaja Tamm and Wälchli (2001: 729) characterize the case alternations between total and partial objects (usually involving the partitive of negation in one way or another) as typologically “probably unusual but not unique” to Circum-Baltic languages; their observation is not based on a cross-linguistic survey going beyond their Circum-Baltic areal focus. The partitive of negation has also been noted in general typological literature on negation, e.g., in Payne (1985), Forest (1993), Honda (1996), and Miestamo (2005), as well as in Moravcsik’s (1978) article on the typology of object marking. Payne lists it as one of the “secondary modifications” that may be found in negatives in addition to negative marking itself. In Miestamo (2005), I noted that it can be seen as one of the many ways in which negatives show structural asymmetry vis-à-vis affirmatives, but did not include it in the scope of my typological survey. In the literature the examples are taken from the familiar European languages mentioned above, and no typological information is available on the cross-linguistic frequency or areal distribution of the phenomenon. The same lack of typological information is true of other effects of negation on the marking of noun phrases. To fill this lacuna in the typological literature, this chapter presents a typological survey of the partitive of negation and related effects of negation on the marking of grammatical categories in noun phrases. It should perhaps be noted that negative polarity items, although closely related to the issue of the marking of grammatical categories in noun phrases under the scope of negation, are beyond the scope of the present survey. I will now turn to the material and method of the survey.

2. Material and method

This section will explicate the methodological choices adopted in the cross-linguistic survey of the nature and spread of the partitive of negation and related effects on the marking of noun phrases under negation. The partitive of negation is here defined as the obligatory or preferred use of partitive marking, or marking that has partitivity as one of its functions, on noun phrases under the scope of negation, in contrast to the corresponding noun phrases in affirmatives showing less or no partitive marking. Partitive marking is here defined simply as marking that denotes a part of a whole, or more generally, an indefinite quantity (cf. the function of partitive case in the Finnish example in 1b above).

In the typological survey, I have paid attention to all realizations of the partitive of negation found in the languages surveyed. The partitive of negation is part of the broader question of how the marking of noun phrases is affected under negation. Other effects of negation on the marking of grammatical categories within noun phrases are also paid attention to in the survey, with a focus on effects that are connected to the domains of quantification, referentiality/specificity and aspect – the domains that have been suggested to be relevant in finding functional motivations for the partitive of negation. Referentiality and specificity are used roughly synonymously in this paper; in referential/specific use of noun phrases the identity of the referent is established, i.e. the speaker has in mind a specific entity or entities to which the noun phrase refers.

This study is primarily based on a sample of 240 languages.⁴ The sample languages come from different genera (in the sense of Dryer 1989; see also Haspelmath et al. 2005; Dryer and Haspelmath 2011), i.e. no two languages come from the same genus. The same language sample has been used in my earlier work on negation (see Miestamo 2005: 27–39, 241–254). In that study I focused on structural differences between negatives and affirmatives manifested on the verbal and clausal levels, but did not pay attention to the marking of noun phrases. When examining the sources of the sample languages, I did, however, try to make notes of everything the sources said on negation. The present paper is based on a re-examination of those notes and going back to the original sources in case the notes indicated a given language might show some effects of negation on the marking

⁴ To the extent possible, all language names in this paper are given in the form in which they appear in *The world atlas of language structures* (Haspelmath et al. 2005; Dryer and Haspelmath 2011).

of noun phrases.⁵ The survey of the sample languages was supplemented by a query on the Lingtyp mailing list, asking for pointers to languages that have the partitive of negation or any other changes in the marking of noun phrases induced by negation.⁶

In the survey I have taken into account all languages in which I have found some effects of negation on the marking of noun phrases, regardless of whether they belong to the 240-language sample, or whether I have become aware of the data through the Lingtyp query or in other ways. I have then classified the observed effects into types according to their structural and functional properties. When making observations about the cross-linguistic frequency of the different types, it is important to base these observations on an areally and genealogically balanced language sample. The 240-language sample provides such a basis, and in principle it would be possible to balance it even further in areal-genealogical terms following the principles introduced in (Miestamo 2005). However, as the following section shows, the types are all quite rare and areally and genealogically constrained so that quantitative analysis would not make much sense in this study. The cross-linguistic observations and generalizations are presented in Section 3, and their possible functional motivations are discussed in Section 4.

3. Results

The broad cross-linguistic survey conducted here confirms Koptjevskaja Tamm and Wälchli's (2001: 729) estimation that the partitive of negation is typologically unusual. In fact, clear instances of the partitive of negation realized as part of a case marking system were not found outside the European languages already known to exhibit the phenomenon. In this section, I will start with a closer look at the effects on case marking, and then move on to other types of elements affected by negation, such as articles and other determiners, and class-markers, and finally say a few words on the effects of negation on focus marking and alignment.

As mentioned in Section 1, a number of European languages (Finnic, Baltic, Slavic and Basque) use a case with a partitive function on noun phrases in the scope of negation,

⁵ In (Miestamo 2005) the sample size was actually 297 languages, but only 240 languages belonged to the core sample in which every language comes from a different genus. For the 57 extra languages notes were not made on negation-related phenomena that were outside the scope of the study, and thus no systematic notes were available on effects of negation on the noun phrase level for these languages.

⁶ The original query as well as a summary of the replies is available in the archives of the mailing list at <<http://listserv.linguistlist.org/cgi-bin/wa?A0=LINGTYP>> (see October 2009, Week 5; November 2009, Week 1).

either obligatorily or as a matter of preference. The main characteristics of these systems will now be discussed (for a more detailed presentation, see Koptjevskaja Tamm and Wälchli 2001: 650–671).

Finnish has a system in which noun phrases in the scope of negation are marked with the partitive case. Both objects of transitive sentences and subjects of existential sentences are affected. Let us first look at the objects of transitives, see the examples in (2).

(2) Finnish (constructed examples)

- a. *söin banaani-n*
eat.PST.1SG banana-GEN
'I ate {a/the} banana.'
- b. *söin banaani-t*
eat.PST.1SG banana-PL.NOM
'I ate the bananas.'
- c. *söin banaani-a*
eat.PST.1SG banana-PAR
'I {ate some / was eating {a/the}} banana.'
- d. *söin banaane-j-a*
eat.PST.1SG banana-PL-PAR
'I {ate (some) / was eating {(some)/the}}bananas.'
- e. *en syönyt banaani-a*
NEG.1SG eat.PST.PTCP banana-PAR
'I {didn't eat / wasn't eating} {a/the} banana.'
- f. *en syönyt banaane-j-a*
NEG.1SG eat.PST.PTCP banana-PL-PAR
'I {didn't eat / wasn't eating} (the) bananas.'

In the affirmative, total and partial objects can be distinguished. I will not go into details about their semantics, but as a general rule, it can be said that total objects are interpreted as totally affected and the sentence gets a perfective aspectual reading whereas partial objects are partially affected and usually give an imperfective reading to the sentence. Total objects are marked with the genitive or nominative case, depending on the number of the object and its morphosyntactic environment, e.g., clause type; the examples in (2a–b) are simple affirmative declaratives. Partial objects are marked with the partitive (2c–d). In the negative, only the partitive is possible (2e–f), and the distinction between total and partial objects cannot be made. The requirement of the partitive on objects of negated clauses is highly grammaticalized in Finnish. Only

marginally, under specific semantic-pragmatic conditions, is it possible to have non-partitive objects in negatives (see Almqvist 1987).⁷ Note that there are verbs that require their objects to be in the partitive in the affirmative as well, but I will not go into these lexical issues here.

Case marking differs between affirmatives and negatives in a related way in some existential sentences as well, see the examples in (3).⁸

(3) Finnish (constructed examples)

- a. *pöydällä on omena*
table.ADE be.3SG apple.NOM
'There is an apple on the table.'
- b. *pöydällä on omena-a*
table.ADE be.3SG apple-PAR
'There is some apple on the table.'
- c. *pöydällä ei ole omena-a*
table.ADE NEG.3SG be.CNG apple-PAR
'There is {not an apple / no apple} on the table.'
- d. *pöydällä on omeno-i-ta*
table.ADE be.3SG apple-PL-PAR
'There are apples on the table.'
- e. *pöydällä ei ole omeno-i-ta*
table.ADE NEG.3SG be.CNG apple-PL-PAR
'There are notapples on the table.'

In affirmatives, singular subjects can be in the nominative or in the partitive with a quantificational difference in semantics (3a,b), and plural subjects are in the partitive (3d) (the nominative could replace the partitive in 3d but it would produce a definite reading and require a special contrastive context in this clause type). In negatives, the subject of the existential is in the partitive in both singular and plural (3c,e). The details

⁷ Essentially, these are cases in which there is a positive implication despite the overtly negative form of the sentence. An example would be *Ei liene järin ylivoimaista toteuttaa tuo pyyntö.* (NEG.3SG be.POT.CNG very insurmountable fulfill.INF that.NOM request.NOM) 'It shouldn't be too hard to fulfill that request' (Almqvist 1987: 163). In most cases, like here, the total object under negation is the object of an infinitive itself under the scope of a negated finite verb.

⁸ These are existential predications. Locative predications would have the subject in nominative case and exhibit some other word order than LOCATION + COPULA + SUBJECT, most typically SUBJECT + COPULA + LOCATIVE.

of the Finnish case alternations are complicated and have generated a lot of literature (e.g., Almqvist 1987), but in this typological survey I will not delve deeper into those details. Note finally that at an earlier (reconstructed) stage of the language, the function of the partitive case was separative (movement from), see for example (Hakulinen 1961: 93).

The system is essentially similar in most other Finnic languages, e.g., Estonian (Erelt 2003: 95–97; Metslang, this volume) and Votic (Ariste 1968: 21). There are some differences, of course, e.g., according to Metslang (2001), the role of case in the marking of aspect is not as important in Estonian as it is in Finnish, since the verbal particle *ära* is used together with total objects to mark perfectivity. In Liv, as noted by Koptjevskaja Tamm and Wälchli (2001: 652), a development has been observed whereby the partitive would be spreading as a general object case, making thus the alternation obsolete. As to existential clause subject marking in other Finnic languages, the system is, in the main, similar to Finnish (see Huumo and Lindström, this volume, for more details on the uses of the partitive in Estonian and Finnish existentials).

In Lithuanian (Dambriunas 1972: 27, 39, 123, 139–141, 166; Ambrazas et al. 1997: 500–506, 667–668), the direct object is in the genitive in negatives. In non-negatives, most verbs take accusative objects, but the genitive may be used to refer to an indefinite amount or quantity where the nominative or accusative would otherwise be used. Subjects of negative existentials are in the genitive if they are in the scope of negation; in the affirmative, genitive subjects may be used with selected verbs to denote indefinite quantity. In Latvian, subjects of negated existentials are in the genitive, but objects of transitive sentences do not show the partitive of negation, see (Lazdina 1966: 24, 28; Holst 2001: 207–210; Fennel and Gelsen 1980: 22–23, 26).

In Polish (Bielec 1998: 69–70, 103, 117–118; Swan 2002: 333–335), the direct object in negatives is in the genitive instead of the accusative used in affirmatives (4a,b). The subjects of negative existentials are also in the genitive instead of the nominative used in affirmatives (4c,d). The genitive has partitive uses in non-negatives (4e).

(4) Polish (Swan 2002: 333; Bielec 1998: 70, 121)

- | | |
|--|---|
| a. <i>Oglądam telewizję.</i>
watch.1SG television.ACC
'I watch television.' | b. <i>Nie oglądam telewizji.</i>
NEG watch.1SG television.GEN
'I don't watch television.' |
| c. <i>W parku jest fontanna</i>
in park.LOC is fountain.NOM
'There is a fountain in the park.' | d. <i>W parku nie ma fontanny</i>
in park.LOC NEG have fountain.GEN
'There is no fountain in the park.' |

- e. *Kupię mleka i sera.*
buy.1SGmilk.GEN and cheese.GEN
'I'll buy some milk and cheese.'

In Russian (Wade 2000: 111–115; Krasovitsky et al. 2010), the use of the genitive is not obligatory in direct objects under negation and depends on various factors, including definiteness and specificity, definite and specific objects being more readily accusative-marked; verbal aspect and the lexical semantics (e.g., abstractness) of the noun also play a role. Subjects of negative existentials are in the genitive instead of the nominative used in affirmative existentials. In Ukrainian the system is largely similar to Russian (Pugh and Press 1999: 97–99). In Czech (Naughton 2005: 196–198), the genitive is used in these functions only occasionally, in contemporary language largely restricted to fixed phrases. In other Slavic languages the partitive of negation is even more restricted or non-existent.

The only language outside Finnic, Baltic and Slavic exhibiting the partitive of negation expressed within a morphological case marking system is Basque.⁹ In Basque (Hualde and Urbina 2003: 124–126, 549–554), the partitive case marked with *-(r)ik* regularly occurs on transitive objects and intransitive subjects in negative sentences. It may also occur in other contexts, e.g., polar interrogatives and conditionals. It is interpreted as non-specific. Its diachronic origin is in the ablative suffix (Hualde and Urbina 2003: 551). If negatives have an object with a specific/definite reading, the partitive is not used (cf. Etxeberria, this volume; Koptjevskaja Tamm and Wälchli 2001: 666).¹⁰

I will now leave case marking and turn to the effects of negation on other types of marking in noun phrases. In French, as example (5) shows, the determiner *de* (glossed here simply as DET) replaces the indefinite article under the scope of negation both in regular transitives and in existentials.

(5) French (constructed examples)

- a. *je vois un chien*
1SG.NOM see.1SG INDF.M dog
'I see a dog.'

⁹ Note that its status as a case is questioned by Hualde and Urbina (2003: 124). In any case, it is a partitive marker and thus relevant in the present context.

¹⁰ In Evenki, noun phrases in privative constructions with the negative noun *a:chin* take the indefinite accusative (partitive) case, but this case does not seem to be used in existential predications with *a:chin* (see Nedyalkov 1994: 4, 27–29; Pakendorf 2007: 162–164).

- b. *je ne vois pas de chien*
1SG.NOM NEG see.1SG NEG DET dog
'I do not see a dog.'
- c. *il y a un livre sur la table*
EX INDF.M book on DEF.F table
'There is a book on the table.'
- d. *il n'y a pas de livre sur la table*
EX.NEG DET book on DEF.F table
'There is no book on the table.'
- e. *je bois du lait*
1SG.NOM drink.1SG PAR.M milk
'I'm drinking (some) milk.'
- f. *je ne bois pas de lait*
1SG.NOM NEG drink.1SG NEG DET milk
'I'm not drinking milk.'
- g. *je vois des chiens*
1SG.NOM see.1SG PAR.PL dog
'I see (some) dogs.'
- h. *je ne vois pas de chiens*
1SG.NOM NEG see.1SG NEG DET dog.PL
'I do not see dogs.'

In most contexts, the determiner *de* occurs in front of the noun phrase in the scope of negation (5b,d) where the corresponding affirmatives have indefinite articles (5a,c). With non-count and plural count nouns, the determiner *de* replaces the so-called partitive article, formed by the combination of the separative preposition *de* and the definite article (see 5e–h).

It may now be asked, how the alternation between indefinite/partitive articles used in affirmatives vs. the determiner *de* used in negatives is related to the partitive of negation – after all, the marker appearing under negation is not a partitive marker per se and there seems to be a partitive marker used in affirmatives but not in negatives. First of all, although the partitive article appearing in affirmatives derives historically from a partitive construction expressing a part of a whole, in contemporary French it has lost this function and functions primarily as an indefinite article with non-count and plural count nouns (see Carlier 2007). Thus, we are actually dealing with an alternation between indefinite articles and the determiner *de* in these cases, too. Secondly, the determiner *de* can be seen as related to the partitive in the following way. As mentioned above, the

partitive article, formed by the combination of the separative preposition *de* and the definite article, had a truly partitive meaning in older stages of French. In the combination of *de* and a definite article, it was the separative preposition *de* that contributed the meaning of extracting a part of the whole and was thus responsible for the partitive meaning of the combination. The determiner *de* is etymologically the same element as the separative preposition (cf. the diachrony of the Finnish and Basque partitive case markers above). Its connection to partitives is further demonstrated by the fact that it is required to appear before nouns with most quantifiers, e.g., *peu de lait* ‘little milk’, *beaucoup de lait* ‘a lot of milk’. The French alternation thus shows clear similarities to the partitive of negation as defined in this paper.

Taking a closer look at the function of the alternation in contemporary French, we may note that the so-called partitive article may actually appear under negation, but it then gets a referential reading as in (6a).

(6) French (constructed examples)

- a. *je ne bois pas du lait qu’ il m’ offre*
 1SG.NOM NEG drink.1SG NEG PAR.M milk REL 3SG.NOM 1SG.DAT offer
 ‘I’m not drinking (any of) the milk he’s offering me.’

This shows us that the use of the determiner *de* under negation is in fact connected to the referentiality of the noun phrase. I will not enter into a more detailed discussion of the French facts here, but I will come back to the issue of referentiality at many points later in this paper.

Article usage is affected by negation in Albanian as well: according to (Newmark et al. 1982: 152), negative generic expressions (with meaning ‘(there is) not a / no’) take indefinite nouns without indefinite article. Givón (1978: 74, citing Robert Hetzron, p.c.) notes that in Hungarian the indefinite article conveying a referential indefinite reading cannot be used with the object of a negated sentence. Another case of the use of articles affected under negation is found in the Brazilian language Nambikuára (7).

(7) Nambikuára (Kroeker 2001: 34)

- a. *hu³kx-a² yĩ³n-a¹-wa²*
 bow-DEF own-1SG-IPFV
 ‘I have a bow.’
- b. *hu³ki³-la² yĩn²-nxa³-wa²*
 bow-NEG own-1SG.NEG-IPFV
 ‘I don’t have a bow.’

In transitive and nonverbal negative sentences, the negative clitic *-la*³ occurs on the object and replaces the definite or indefinite article suffix, see (Kroeker 2001: 34, 43, 46, 76). The effects on article usage found in Albanian, Hungarian and Nambikuára are not instances of the partitive of negation in the sense defined above, and the same is, in the main, true for the effects of negation on the marking of noun phrases discussed in what follows. However, as will be shown, most of the phenomena to be discussed are relevant for understanding the motivation of the partitive of negation.

According to Creissels (2009: 90, 165), Kita Maninka, spoken in Mali, has a marker of definiteness on the noun. In affirmatives, this marker, despite its name, is used in both definite and indefinite contexts (8a–b; note that this marker is purely tonal: *yiri* vs. *yìri*), and definiteness may be specified by determiners as in (8c–d). In negatives, the presence of the definiteness marker on the noun is not obligatory and a distinction between indefinite (non-referential) vs. definite may be made by the form of the noun alone (8e–f).

(8) Kita Maninka (Creissels 2009: 90–91)

- a. *n dí yiri tège*
 1 CMPL.AFF tree.DEF cut
 ‘I cut a/the tree.’
- b. **n dí yiri tège*
 1 CMPL.AFF tree cut
- c. *n dí yirì dò tège*
 1 CMPL.AFF tree.DEF EXTR cut
 ‘I cut a tree.’
- d. *n dí yiri ’n tège*
 1 CMPL.AFF tree.DEF DEM cut
 ‘I cut the tree.’
- e. *n mán yiri tège*
 1 CMPL.NEG tree cut
 ‘I didn’t cut a/any tree.’
- f. *n mán yiri tège*
 1 CMPL.NEG tree.DEF cut
 ‘I didn’t cut the tree.’

The definiteness marker could be characterized as a default determiner whose absence is licensed by certain contexts only. Negative is one of these contexts, and this choice is also available in interrogatives.

In a number of Bantu languages, negation has an effect on the form of the noun class prefixes, see the Xhosa examples in (9).

(9) Xhosa (Taraldsen 2010: 1526–1527)

- a. *ndi-bon-a a-ba-fundi*
1SG-see-FV DET-CL-student
'I see the/some students'
- b. *a-ndi-bon-i ba-fundi*
NEG-1SG-see-FV CL-student
'I don't see any students'
- c. *a-ndi-ba-bon-i a-ba-fundi*
NEG-1SG-CL-see-FV DET-CL-student
'I don't see the students'
'There are some students I don't see.'

In the affirmative (9a) the noun class prefix *-ba-* is preceded by a pre-prefix, a kind of default determiner that can be absent in certain contexts only (very much like the definiteness marker in Kita Maninka above, Denis Creissels, p.c.). Negation is one of the contexts in which the default determiner can be omitted (9b). The determiner can be found in negatives, as well, if the object prefix also appears on the verb (9c), i.e. when the object is definite (or, more rarely, specific indefinite). The same phenomenon is found in closely related languages such as Zulu (see Doke 1961: 300–301), as well as in some more distantly related Bantu languages such as Bemba, Bobangi, Kinyarwanda and Luganda (see Givón 1978: 74–75). Doke's examples show that interrogatives form another context in which the absence of the pre-prefix is possible in Zulu (cf. Kita Maninka above).

In the Australian language Nunggubuyu, according to Heath (1984: 526–531), negation has a number of effects on the structure of the clause. One of these effects is that nominals in the scope of negation obligatorily have a noun class prefix and furthermore non-humans must have the continuous rather than the punctual aspect noun class prefix. In non-negative contexts, the choice of overt prefix and continuous prefix for nonhumans depends on a multitude of factors including case, givenness/definiteness (for the functions of noun class prefixes, see Heath 1984: 163–173). Heath (1984: 169) notes that in the nominative (the case used for subjects and objects) where the opposition is the most significant, the presence of (continuous) prefix correlates with definiteness and givenness and its absence with focus and foregrounding.

Some Oceanic languages, e.g., Araki spoken in Vanuatu, show an interesting interaction between negation and determiners that are often termed partitive markers.

Consider the Araki examples in (10) (Alexandre François, p.c.; see also François 2002: 54–68).

(10) Araki (Alexandre François, p.c.)

- a. *nam les-i-a jau lo leḗa*
1SG.R see-OBJ.REF-3SG coconut.crab LOC ground
'I've seen a/the coconut crab on the ground.'
- b. *nam les-i-a jau mo-hese lo leḗa*
1SG.R see-OBJ.REF-3SG coconut.crab 3.R-one LOC ground
'I've seen a coconut crab on the ground.'
- c. *nam je les re jau lo leḗa*
1SG.R NEG see PAR coconut.crab LOC ground
'I haven't seen a/any coconut crab on the ground.'
- d. *nam je les-i-a jau lo leḗa*
1SG.R NEG see-OBJ.REF-3SG coconut.crab LOC ground
'I haven't seen the coconut crab on the ground.'
[but not *'I haven't seen a coconut crab on the ground.']

In realis affirmatives, as in (10a), objects are bare noun phrases and the verb bears a marker of referential object and person-number cross-reference. The object may be further specified as indefinite by the specific indefinite marker *mo-hese* (10b). In the negative, there is no cross-reference on the verb and the object is marked by the partitive marker *re* (10c). Referential marking and cross-reference on the verb is possible in negatives, but then the reading is definite (10d); in this case *re* does not occur.

The specific indefinite marker *mo-hese* is impossible in negatives (11a) and the partitive *re* is impossible in realis affirmatives (11b). As can be seen in (11c–d), both specific and non-specific are possible in irrealis affirmatives. In the negative, realis and irrealis behave in the same way.

(11) Araki (Alexandre François, p.c.)

- a. **nam je les-i-a jau mo-hese lo leḗa*
1SG.R NEG see-OBJ.REF-3SG coconut.crab 3.R-one LOC ground
*'I haven't seen a coconut crab on the ground.'
- b. **nam les re jau lo leḗa*
1SG.R see PAR coconut.crab LOC ground
*'I have seen any coconut crab on the ground.'

- c. *na pa han re jau*
 1SG.IRR FUT eat PAR coconut.crab
 ‘I will eat a/some coconut crab.’
- d. *na pa han-i-a jau*
 1SG.IRR FUT eat-OBJ.REF-3SG coconut.crab
 ‘I will eat the coconut crab.’

Alexandre François (p.c.) summarizes the situation as in Table 1. The marker *re* is also found in negative existentials (see François 2002: 65–66), but there it seems to have grammaticalized as part of the negative existential predicate. Affirmative existentials do not use *re*.

Table 1. Verbal cross-reference and marking of referentiality in noun phrases in Araki (Alexandre François, p.c.)

	AFF REALIS	AFF IRREALIS	NEG REALIS	NEG IRREALIS
OBJECT [+ def]	V- <i>i-a</i> + N	V- <i>i-a</i> + N	V- <i>i-a</i> + N	V- <i>i-a</i> + N
OBJECT [-def, +ref]	V- <i>i-a</i> + N(<i>mo-hese</i>)	*	*	*
OBJECT [-def, -ref]	*	V + <i>re</i> N	V + <i>re</i> N	V + <i>re</i> N

The marker *re* is referred to as the partitive-indefinite marker by François (2002: 59), because it has among its prototypical uses the partitive function (‘some [water]’), but on the same page, the author describes it as a marker of non-specific indefinite reference, and this seems to be the core meaning of the marker. Given that *re* has a partitive function, too, the Araki case can be seen as an instance of the partitive of negation.

A situation closely similar to what was just described for Araki obtains in Maŕvea, another Oceanic language of Vanuatu (Guérin 2007), a marker of non-referentiality appearing in negative contexts. Samoan is another Oceanic language with a similar alternation between markers of specificity and non-specificity. In this language (see Mosel and Hovdhaugen 1992: 263–264, 480), a distinction between specific and non-specific reference can be made using articles. In the present context, it is worth noting that the non-specific article is obligatory with the absolute noun phrase of the negative existential verb *leai*. This is a highly grammaticalized restriction, since it also applies to proper names. The absolute noun phrase arguments of *lē/le’i maua* ‘do not get’ and *lē/le’i lagona* ‘do not feel’ behave similarly. Furthermore, whereas in positive generic verbal clauses the arguments are determined by the singular specific article, in negatives the non-specific article is used. In negative (and polar interrogative) equational clauses the predicate noun phrase is obligatorily non-specific if it expresses a quality, but

predicates of identification are specific. According to Claire Moyse-Faurie (p.c.), a pattern similar to what is found in Samoan is common in Polynesian languages (see also Budd, this volume).

Another case of negation affecting the marking of referentiality is reported from the Chadic language Hdi (Frajzyngier and Shay 2002: 333–334; Wolff 2009: 49). In this language, the suffix *-ta* on the verb marks the referentiality of the event; one characteristic of a referential event is the referentiality of the object. The referential suffix does not occur in negative clauses. This is not an effect of negation on the marking of noun phrases, but it is clearly functionally related to the effects discussed above.

Finally, it is worth mentioning in this discussion of the relationship between partitives and negation, that some Oceanic languages show an interaction between negation and partitive markers appearing on the verb. In Paamese (Crowley 1982), yet another language of Vanuatu, as can be seen in the examples in (12), the verb receives a partitive marker when negated.

(12) Paamese (Crowley 1982: 144, 145)

- | | |
|----------------------------------|------------------------|
| a. <i>long-e</i> | b. <i>ro-longe-tei</i> |
| 3SG.R.hear-3SG.OBJ | NEG-3SG.R.hear-PAR |
| ‘He heard him.’ | ‘He did not hear him.’ |
| c. <i>longe-nV</i> | <i>ree-ku</i> |
| 3SG.R.hear-COMM.OBJ | voice-1SG |
| ‘He heard my voice.’ | |
| d. <i>ro-longe-tei</i> | <i>ree-ku</i> |
| NEG-3SG.R.hear-PAR | voice-1SG |
| ‘He didn’t hear my voice.’ | |
| e. <i>ma-ani-tei</i> | <i>raise</i> |
| 1SG.IM-eat-PAR | rice |
| ‘I would like to eat some rice.’ | |

The partitive suffix appears on the verb in negated intransitives and transitives with non-generic objects. It can also be used in affirmatives to convey partitive meaning (12e). In intransitive affirmatives, the function of the partitive is to express “that the action or the state depicted by the verb is attained only a little and is not a major performance of the action or a complete achievement of the state”, and in transitive affirmatives “that the referent of the object is an indefinite subset of the total possible class of objects” (Crowley 1982: 144). The function of the partitive is thus similar to the functions of the partitive markers appearing in noun phrases in other languages seen above, but in Paamese the

partitive marker is a verbal suffix. What we find in Paamese is closely related to the partitive of negation. It is interesting to note that in the related language Lewo, the partitive marker *re* modifying the verb has grammaticalized as a negative marker; the partitive marker still exists in the same phonological form but cannot cooccur with the negator *re*, and the diachronic development, motivated by the functional connection between negation and partitive, has thus led to a situation in which negation and partitive are mutually exclusive (see Early 1994 for details).

We have seen that Araki (and some other Polynesian languages) show an explicit connection between negation and the marking of referentiality. It will be argued in Section 4 that the partitive of negation and most of the other effects of negation on the marking of noun phrases taken up so far can also be seen as functionally motivated by the effects of negation on the referentiality of arguments. The above discussion of these cases is therefore interesting in view of placing the partitive of negation in a typological-functional context. Before concluding this section, I will briefly mention some other effects that negation may have on the marking of noun phrases, but that cannot be directly linked with referentiality, and are therefore not central to the aims of this paper.

In the Bantu language Aghem (Hyman 2010; Larry Hyman, p.c.), negation is treated as inherently focused, which has the effect that objects are treated as obliques in negatives. A connection between focus and negation is found in many languages of Africa, resulting in different structural asymmetries between affirmation and negation. An incompatibility between negation and focus in Kanuri is noted by Cyffer (2009: 87, 89–90; see also some other papers in that volume for the relationship between negation and focus in African languages). In Lavukaleve (Terrill 2003), too, negation has some effects on the marking of focus (see also Miestamo 2005: 137). The relationship between negation and focus has not received a lot of attention in typological studies of negation, and remains a fruitful topic for future work.

Finally, it may be noted that in some languages, the alignment system is affected by negation. According to Eduardo Ribeiro (p.c.), in Northern Ge languages (Central Brazil), negation triggers an ergative alignment pattern, and the verb is nominalized (see Silva 2001 for Kayapó, Alves 2004 for Canela, and Oliveira 2005 for Apinayé). In fact, the ergative pattern appears with nominalization in other contexts as well, not only negation, and it is thus the nominalization that is responsible for the ergative pattern, and ergativity is triggered by negation only indirectly. In Yimas, one of the effects of negation is that the alignment pattern of the clause changes with respect to the corresponding affirmative; in Yimas, too, this is connected with nominalization (cf. Foley 1991, see Miestamo 2005: 146–149 for discussion). It is not rare in the world's languages that negation requires a nominalized or otherwise non-finite verb (see Miestamo 2005: 73–96, 172–174).

Table 2 recapitulates the effects of negation observed in this section. Since these phenomena are cross-linguistically rather uncommon, it is not possible to make quantitative analyses of their frequency and distribution. All relevant cases found in the survey are mentioned here. I will now move on to discuss their possible functional motivations.

Table 2. Summary of the effects of negation discussed

Partitive/genitive case used	Finnic: Finnish, Estonian, Votic, Liv, etc.; Baltic: Lithuanian, Latvian; Slavic: Russian, Ukrainian, Polish; Basque
Non-specific (partitive) determiner used	Araki, Ma'vea, Samoan and various other Polynesian languages; French
Omission / restrictions on use of article	Albanian; Hungarian; Nambikuára
Absence of default determiner possible	Kita Maninka; Bantu: Xhosa, Zulu, Bemba, Bobangi, Kinyarwanda, Luganda
Class marker obligatory	Nunggubuyu
Absence of referentiality marker on verb	Hdi
Partitive marker on verb	Paamese
Effects on focus marking	Aghem; Kanuri; Lavukaleve
Effects on alignment	Northern Ge: Kayapó, Canela, Apinayé; Yimas

4. Discussion and conclusion

In Section 1, it was briefly mentioned that the partitive of negation and the other effects of negation on the marking of noun phrases discussed in Section 3 can be seen as instances of structural asymmetry between affirmation and negation. In Miestamo (2005), I made a distinction between symmetric and asymmetric negation according to whether there are structural differences between negatives and their affirmative counterparts in addition to the presence of negative markers. Different types of asymmetry between affirmation and negation were discussed, but the focus was on markings appearing on the verbal and clausal levels, not within noun phrases. In this paper I have looked at asymmetry phenomena on the noun phrase level.

Functional motivations behind symmetric and asymmetric negatives can be understood in terms of the concepts of language-internal and language-external analogy (cf. Itkonen 2005). Symmetric negation, like any regularity in linguistic structure, is motivated by language-internal analogy: negatives simply copy the structure of the affirmative and are thus language-internally analogous to the structure of the affirmative, ultimately motivated by structural cohesion that helps processing and storage. Asymmetric negatives copy different aspects of the functional (semantic and pragmatic) properties of negation

that differ from the functional properties of affirmation, and are thus language-externally analogous to these functional-level asymmetries between affirmation and negation. In Miestamo (2005: 195–235) I discussed the different functional properties of negation motivating the different types of asymmetry between affirmatives and negatives established in that study. In the following, I will address the functional motivations of the noun phrase-level asymmetries observed in Section 3.

Givón (1978) discusses the relationship between negation and referentiality. Consider the examples in (13).

(13) English (Givón 1978: 72)

- | | |
|--|---|
| a. <i>John met a girl yesterday</i>
... and Fred met one too
...and Fred met her too | b. <i>John didn't meet a girl yesterday</i>
... and Fred didn't meet one either
* ... and Fred didn't meet her either |
|--|---|

The object noun phrase in the affirmative sentence (13a) can get either a nonreferential or a referential reading as shown by the possible ways of continuing the sentence. In the negative (13b), only a non-referential reading of the object noun phrase is felicitous, and the continuation compatible with a referential reading is odd. There is a general tendency for indefinites in the scope of negation to be non-referential. This tendency is motivated by the discourse context of negation. Negative sentences are used in contexts in which the corresponding affirmative is present in one way or another; typically, the speaker assumes that the hearer believes the corresponding affirmative to be the case. Negatives are therefore not used to introduce new referents to the discourse. Referential objects are first introduced in affirmatives and appear as definite in negatives. The connection between negation and non-referentiality is also observed, e.g., by Hopper and Thompson (1980). In their transitivity criteria, negation and non-referentiality of the object (O non-individuated) are among the correlates of low transitivity and affirmation and referentiality of the object (O highly individuated) are among the correlates of high transitivity.

Many of the effects of negation observed in Section 3 can be linked to the connection between negation and non-referentiality. In the case of the Oceanic determiners this is clear: determiners with the expression of non-referentiality as their primary function are used with indefinite noun phrases under negation. In French, too, the determiner *de* appears with non-referential nouns. In Hdi, a marker of referentiality is omitted under negation. The absence of the default determiners in Kita Maninka and the Bantu languages mentioned above are also connected to referentiality; the default determiner is absent when the noun phrase is non-referential, and the determiner is used with

referential noun phrases (which are overwhelmingly definite under negation). As to the effects on article usage in Hungarian, it is the indefinite article conveying a referential reading that is not used under negation. Referentiality effects are possibly also behind the asymmetry found in Nunggubuyu, since definiteness and givenness are mentioned as correlates of the obligatory use of class markers.

As to the motivations of the partitive of negation in Finnic, Baltic, Slavic and Basque, I want to suggest that the functional connection between negation and non-referentiality (and ultimately the discourse context of negation) plays an important role in motivating these cases as well. Partitives refer to a non-individuated mass, rather than a clearly delimited entity and they thereby provide a useful form for expressing indefinite non-referential meanings. A connection between partitive (genitive) case and non-referentiality has been observed in the literature, e.g., for Russian (see Krasovitsky et al. 2010: Section 2) and Basque (see above); see also Luraghi and Kittilä (this volume). As to Finnish, the distinction between total and partial objects in affirmatives is linked with referentiality, total objects being correlated with referentiality and partial objects with non-referentiality, and the referentiality of the object is one of the factors that increases the (very low) probability of a total object appearing under negation (see Almqvist 1987: 26, 156). In addition to referentiality, the use of the partitive in negatives is also motivated by its quantificational function. In negative sentences the action is not carried out completely, or not at all, and therefore objects are not affected by the action completely, or not at all. These motivations taken together may lead to the grammaticalization of the partitive of negation in some languages.

Another factor connected to the partitive is aspectuality. In Finnish, partial objects correlate with imperfective aspect and total objects with perfective aspect. It has sometimes been claimed (e.g., Schmid 1980) that perfective aspect and negation are incompatible in the world's languages so that imperfective aspect would be more likely to appear under negation. In (Miestamo 2005: 180–181) I showed, however, that this does not hold true in a wider typological perspective, perfective- and imperfective-type aspects being equally likely to be excluded in negatives (see also Miestamo and van der Auwera 2011). No wider connection between aspect and negation thus seems to exist in a broad typological perspective. Consequently, although clear connections between aspect and case marking are found in some languages, e.g., in Finnish, the cross-linguistic facts do not provide support for aspectuality as a motivation behind the partitive of negation.

This paper examined the interaction between negation and partitive marking in noun phrases in a typological perspective. The requirement that a case with a partitive function be used on noun phrases under the scope of negation is not found outside the familiar European languages. Other effects of negation on the marking of noun phrases were also

observed, with a special focus on cases that have a connection with referentiality. There is a tendency of indefinite noun phrases in the scope of negation to be non-referential. The partitive of negation was also claimed to be motivated by this connection between negation and non-referentiality. This paper focused on partitives and other effects that bear a functional similarity to them. In future research, a more comprehensive view of the effects of negation on the marking of noun phrases is needed.

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