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Abstract

This paper focuses on the case variation of nouns attested in quantifier constructions of Mordvinic. We illustrate the contexts in which the case variation occurs and investigate the reason behind it. Data is extracted from the MokshEr-corpus, which consists of texts written in the contemporary literary languages. The results show that the marking of the noun varies according to the features of the quantifier and the relationship between the noun and the quantifier. Such variation is observed in three constructions with quantifiers: (1) adnominal modification, (2) partitive constructions, and (3) quantificational clauses. The nominal marking varies between the nominative and separative strategies, which is observed in both languages, although with significant differences in their distribution. We argue that the common starting point for the use of the separative strategy is in partitive constructions, while the differences in the declension paradigm in these languages have led to the different uses of the separative cases.

Keywords: quantifiers, Erzya, Moksha, case variation, corpus investigation

1 Introduction

This paper examines the case variation of nouns in quantifier constructions in two Mordvinic languages, Erzya and Moksha. The case marking of the quantified noun varies between the nominative and the separative strategies. In the nominative strategy, the noun is in the unmarked nominative case as in (1a–b). In the separative strategy, the noun is in the ablative case (2a–b), or in Erzya, also in elative (3).

(1) Erzya

a. *Avaŕija-s pongońe-ś, joma-vt'-ś* ***lamo veŕ***.
accident-ILL got-PST1.3SG lose-CAUS-PST1.3SG much blood.NOM
'S/he got into an accident and lost a lot of blood.' [MokshEr A8, Syatko-2003-3-8]

b. *Ťe* *kize-ste-ńt'* *keńeŕekšńe-št'* ***lamo*** ***at'amaŕ-t'***.
this summer-ELA-DEF ripe-PST1.3PL much cherry-PL.NOM
'A lot of cherries ripened this summer.' [MokshEr A2511, Syatko-2007_1_128-131]

(2) a. Erzya
Ťese ***važod'-ića-t'ńe-d'e*** *avol'* ***lamo***.
here work-PTCP.PRS-PL.DEF-ABL NEG much
'Here, there are not many workers.' [MokshEr A587, EP-2005_21-aprel_2]

b. Moksha
Śas, *mes* *oš-t'* *peŕf* ***lama*** ***šäj-da,*** *a*
therefore because city-DEF.GEN around much bog-ABL and

e-sə-st — ***vatrakš-ta***.
PP-INE-POSS.3PL frog-ABL
'It's because there are a lot of bogs around the city, and frogs in them.' [MokshEr A560, Moksha-2005_1-2_229-234]

(3) Erzya
Alamo *uš* ***ej-ste-st*** *kado-v-kšno-št',* *źardo*
not.much already PP-ELA-POSS.3PL remain-PASS-FRQ-PST1.3PL when

sirgo-ź-ś *vojevoda-ś.*
move-INCH-PST1.3SG voivode-DEF
'Not many of them were left when the voivode woke up.' [MokshEr A2123, Syatko-2004_6_93-97]

The case variation correlates with the features of the quantifier and with the relationship between the noun and the quantifier. In this paper, we scrutinize three construction types, (1) adnominal modification, (2) partitive constructions and (3) quantificational clauses, in which the variation illustrated in Examples (1–3) occurs. In adnominal modification, the noun serves as the head of the phrase, and it gets case ending according to its syntactic function. In partitive constructions, the quantifier serves as the head of the NP and is recategorized as a noun, while the noun serves as a complement to the head. Quantificational clauses display a complex syntactic structure, where the quantifier forms a closer syntactic bond with the predicate but also assigns certain characteristics to the noun. In quantificational clauses, as opposed to adnominal modification and partitive constructions, quantification occurs on the clause level, and the quantifier and the quantified belong to different phrases.

The variation in the marking strategies of NPs in constructions with quantifiers is apparently realized heterogeneously in the two languages despite their close relatedness. So far, the only systematic research on this topic is Alhoniemi (1992). Alhoniemi (1992) analyzes quantifier constructions according to their sentence type and highlights that there are considerable differences between Erzya and Moksha in addition to the internal variation found in case, number, and definiteness marking of the noun accompanying quantifiers. In particular, Alhoniemi (1992) notes that both languages show variation between the nominative and separative marking, as illustrated in (1–3), and that such variation is present in different constructions with mass and paucal quantifiers with the meaning 'many, a lot' and 'few'. Such variation affects three types of construction: (i) the quantifier is used as a nominal predicate, and quantifier accompanies a noun that is (ii) a subject or (iii) an object in the clause (ibid.). The separative marking is more frequent in Moksha across different constructions with quantifiers, while Erzya mostly adheres to nominative marking with less frequent presence of separative cases across the three construction types (ibid.). Furthermore, definite markers are more peculiar to Erzya, especially with separative cases flagging subjects and objects in the clause, while Moksha prefers indefinite nouns unless the noun is flagged with the possessive suffix (ibid.).

In this paper, we extend Alhoniemi's (1992) observation further, using a larger sample of corpus data reflecting the literary standard and quantifying our findings. Similarly to Alhoniemi (1992), we focus on the set of mass and paucal quantifiers E *lamo*, M *lama* 'many, a lot', E *alamo*, M *kərža* 'not many, a few' and investigate the case variation observed in constructions with them. Furthermore, we also consider the declination of the quantifiers and the syntax of the quantified forms and give a possible explanation for the spread of the ablative case in the Moksha constructions.

The structure of the paper is as follows. In Section 2, we briefly provide information on nominal declension, mass and paucal quantifiers, and separative cases in Mordvinic. The data used in this study is described in Section 3. Section 4 provides an analysis of the forms of the quantifiers in the corpora of written languages, their functions, and their relation to the marking of the quantified noun. Section 5 presents a short summary and a discussion on

ambiguous constructions that lead to the spread of the separative strategy across quantifier constructions. Section 6 gives a short conclusion for the paper.

2 Background

2.1 Nominal declension

Mordvinic languages have a complex nominal declension system, with three declension types (basic, definite and possessive) and a great number of cases (see e.g., Anan'ina & Turaeva 1980: 151–152; Bartens 1999: 73; Hamari & Ajanki 2022: 399–403). In both languages, the same declension categories are found, but the combinatory options differ between them. In Table 1, the three declension types are illustrated in the nominative, genitive, ablative, and elative cases. The possessive declension is shown with forms of the third person singular possessor. In Moksha, there are analytic constructions in the definite declension; in Erzya, both analytic and synthetic forms are used (Alhoniemi 1982a; Hamari & Ajanki 2022: 401). We mark them with the asterisk in Table 1.

Table 1. The three declension types in the Mordvinic languages in the nominative, genitive ablative, and elative cases (E *kudo*, M *kud* 'house').

		Basic declension		Definite declension		Possessive	
		Erzya	Moksha	Erzya	Moksha	Erzya	Moksha
NOM	SG	*kudo*	*kud*	*kudo-ś*	*kud'-ś*	*kudo-zo*	*kudə-c*
	PL	*kudo-t*	*kut-t*	*kudo-t'-ńe*	*kut'-t'-ńä*	*kudo-n-zo*	*kudə-nza*
GEN	SG	*kudo-ń*	*kudə-ń*	*kudo-ńt'*	*kud'-t'*	*kudo-n-zo*	*kudə-n-c*
	PL			*kudo-t'-ńe-ń*	*kut'-t'-ńə-ń*		*kudə-nzə-n*
ABL	SG	*kudo-do*	*kudə-da*	*kudo-do-ńt'* *	*	*kudo-do-nzo*	*kudə-də-nza*
	PL			*kudo-t'-ńe-d'e* *	*		
ELA	SG	*kudo-sto*	*kud-sta*	*kudo-sto-ńt'* *	*	*kudo-sto-nzo*	*kud-sta-nza*
	PL			*kudo-t'-ńe-ste* *	*		

In the basic declension, number is distinguished only in the nominative case, whereas in the definite declension number distinction between singular and plural is systematic across cases (Anan'ina & Turaeva 1980: 155; Bartens 1999: 73; Hamari & Ajanki 2022: 400). In contrast to Erzya, Moksha can mark only three cases in the definite declension: nominative, genitive,

and dative (see e.g., Hamari & Ajanki 2022: 400). In other cases, Moksha either uses the forms of the basic declension or analytic postpositional constructions that complement the declension paradigms (Alhoniemi 1982a; Hamari & Ajanki 2022: 400).

Analytic postpositional constructions in both languages are formed with the postposition *e-*/*ez-*, which does not have a meaning of its own in the modern languages but functions as a semantic dummy element that carries the case suffix (Alhoniemi 1982a; Hamari & Ajanki 2022). The noun with the postpositional construction is in the possessive or definite genitive case, e.g., E *kudo-ńt' ej-ste* [house-DEF.GEN PP-ELA] 'from the house', although proper names and pronouns are often in the basic declension, cf. *Maša-ń ej-ste* [PN-GEN PP-ELA] 'from/of Maša'. Person can be expressed with possessive suffixes attached to the postposition, e.g., E *ej-ste-ń* [PP-ELA-POSS.1SG] 'from/of me'. For more details on postpositional constructions see Alhoniemi (1982a).

Erzya language only adheres to an elative ending postposition, *ej-ste* [PP-ELA] 'from', which is also partly used in the functions of the ablative ending, e.g., *pel'ems ej-ste-nze* [afraid-INF PP-ELA-3SG.POSS] vs. *son-d'e-nze* [3SG-ABL-3SG.POSS] 'be afraid of him/her/it'. In contrast, Moksha only uses the postposition with the ablative ending, *ez-da* [PP-ABL] 'from'. Especially in the literary languages, Erzya lacks an ablative ending postposition, though there is the form *ej-ste-d'e* [PP-ELA-ABL] 'from' with the elative and the ablative both attached to the postposition, whereas Moksha does not have the elative ending (see also Alhoniemi 1982a: 36).

According to Alhoniemi (1982a: 37), the separative postpositions have a wide range of different functions in both languages. They partly replace the original ablative and elative cases, but they also have functions different from the synthetic cases. As for the focus of this study, the most important feature of the postpositional constructions is their ability to express part-whole relationships. Alhoniemi (1982a: 37–38) notes that definite supersets can be expressed both with the postpositional separative cases (4a) and, in Erzya, with the elative case, as in (4b).

(4) Erzya
a. *Kije čumo-ś* ***ej-ste-st*** *ul'ńe-ś, a sod-an*.

who guilty-DEF PP-ELA-POSS.3PL be-PST1.3SG NEG know-PRS.1SG
'Who was the guilty one among them, I do not know.' (Alhoniemi 1982a: 37)

b. ***Eŕźa-ń*** ***poet-ne-ste*** *vejke-ks — ašt'i* *Artur Moro*.
Erzya-GEN poet-PL-DEF-ELA one-TRSL stand-PRS.3SG PN PN
'Among the Erzya poets, one is Artur Moro.' (Alhoniemi 1982a: 37)

2.2 Mass and paucal quantifiers

The term *quantifier* is used in various ways in linguistics literature. Its main function is described as indicating a relative or indefinite quantity (see e.g., Suihkonen 2013). In this paper, we restrict our focus to mass and paucal quantifiers E *lamo*, M *lama* 'many, a lot', E *alamo*, M *kərža* 'not many, a few'.[1] The motivation behind such restriction is our interest in the distribution of the separative strategy in quantifying expressions, which is most often mentioned for these quantifiers (Bartens 1999: 118–121; Bernhardt 2023).[2] The term *quantifier* is used henceforth to refer to mass and paucal quantifiers.

Quantifiers are not considered a separate word class in the descriptions of Mordvinic languages, and in fact, are hardly even mentioned. The dictionaries Serebrennikov et al. (1993) and Serebrennikov et al. (1998) treat quantifiers as adverbs. In the dictionaries, only some functions of these quantifiers are illustrated with examples; furthermore, each language highlights their different functions. In the Moksha dictionary (Serebrennikov et al. 1998), the quantifiers are shown in adverbial function with and without a noun, as in (5). In the Erzya dictionary (Serebrennikov et al. 1993), on the other hand, quantifiers are provided as adnominal modifiers, e.g., *lamo inže-t'* [many guest-PL] 'many guests'.

(5) Moksha

[1] While *lamo* and *lama* are cognates in the two languages, Erzya expresses the concept 'a few' with the quantifier *alamo*, which literally means 'not many/much'.

[2] According to Bartens (1999: 119), the separative strategy is also attested with numerals in Moksha. Furthermore, Moksha uses plural forms with smaller numerals, even though it is not common with paucal and mass quantifiers (Alhoniemi 1992). Since the variation is great even within a restricted class of mass and paucal quantifiers, numerals should be separately investigated in the future.

Lama *jota-ń,* ***lama*** *ńäjə-ń,* ***lama*** *pra-ftə-ń*
much go-PST1.1SG much see-PST1.1SG much fall-CAUS-PST1.1SG

śel'məved'
tear
'I walked a lot, I saw a lot, I shed many tears' (Serebrennikov et al. 1998: 323)

Grammars usually discuss mass and paucal quantifiers together with numerals, see e.g. Imârekova (1980: 243; 2000: 95) and Haritonova (2000: 116). Both quantifiers and numerals have nominal features, e.g., decline for cases. Nevertheless, there are some features that distinguish quantifiers from both numerals and nouns. First, not all cases are available for all the quantifiers and some quantifiers are declined in the plural in their nominal function, as for example E *lamo*, M *lama*, see (6). Among the quantifiers, M *kərža* 'not many, a few' declines less frequently than other quantifiers. Second, the possessive declension is attested rarely on quantifiers or is used to mark definiteness, i.e., not in a possessive meaning. The morphological features of the quantifiers are discussed in more detail in Sections 3 and 4.[3]

(6) Moksha
A ***lamə-t'ńə-ń*** *tozk lageŕ-ńə-ń* *e-sa* *mašftə-ź.*
and many-PL.DEF-GEN there camp-PL.DEF-GEN PP-INE kill-PST1.3PL>3PL
'And many were killed there at the camps.' [MokshEr A15, Moksha-2002_16]

Imârekova (1980: 243) provides a list of quantifiers in both languages and mentions that nouns select the plural marking with quantifiers. In the Moksha examples, however, there is no plural marking. As is shown in Section 4.1, Moksha prefers the singular marking, while in Erzya, number marking depends on the countability of the noun.

In the corpora, quantifiers occur in various functions in both languages. The same quantifiers are used with both mass and countable nouns, but the form of the noun varies depending on its semantics. Among the notable marking strategies, we observe either the nominative case or the separative strategy that subsumes the cases reviewed below, in Section 2.3. Different uses of the quantifiers and possibilities for the noun marking are elaborated in Section 4.

[3] See also the frequency lists in the dataset used for this paper: 10.5281/zenodo.15631643

2.3 Separative case markers

There are two separative case markers in the Mordvinic languages: ablative and elative. The ablative case[4] goes back to the Proto-Uralic separative marker *-*tA* (Aikio 2022). It is hypothesized that the Proto-Uralic ablative case was primarily a local case expressing a source with possible metaphoric extensions from the locative meaning. In the modern Mordvinic languages, the ablative is used with this meaning only in some idiomatic expressions, e.g., *kudo-do kudo-s* [house-ABL house-ILL] 'from house to house', and with postpositions, e.g., *al-do* 'from below'.

Among other functions, the ablative case in the two languages is used to denote measured entities and partial objects. In the Moksha grammar, the use with quantifiers and numerals is mentioned as the primary function of the ablative case (Anan'ina & Lomakina 2000: 65–66). Rueter (2023: 493, 515) notes that Moksha uses the ablative case more frequently than Erzya, especially in the quantification of subjects and objects. In both languages, the ablative also expresses a reference point of separation, cause and point of manipulation on the patient, as in (7) (see e.g., Bartens 1999: 93–94; Rueter & Kabaeva 2023: 114 for more details).

(7) Erzya
Anna kund-iźe *sonze* ***ked'-t'e*** *di* […]
PN catch-PST1.3SG>3SG 3SG.GENhand-ABL and
'Anna caught her at her hand and […]' [MokshEr A8, Syatko-2003-3-8]

Erzya also marks the topic of discourse with the ablative case when it is an adjunct to speech and cognition verbs (e.g. *jovt'ń-i večkema-do* [tell-PRS.3SG love-ABL] '(s/he) tells about love', while Moksha prefers postpositional constructions in this function (see Albonico (2023) for the ablative used with cognition verbs).

Instead of the ablative, a newer case ending, the elative, is used nowadays in canonical source constructions (Bartens 1999: 96). The elative is a complex suffix, containing an *s*-element and the original ablative case. There are various attempts to explain the origin of the *s*-element, of lately the most convincing is Ylikoski's (2016) perception, according to which it

[4] Nowadays it is often referred to as the *partitive case* (see e.g., Hamari & Ajanki 2022; Grünthal 2008; Grünthal 2023).

probably originates in a postposition. In the modern languages, the elative is used to express source, material, origin and features in temporal adverbials (see Bartens 1999: 96). Thus, elative has established a concrete, local case meaning. Grünthal (2023) argues that the emergence of the new local case made the shift of the ablative case towards more abstract meanings possible.

3 Data

The present paper is based on an empirical study of two quantifiers in Erzya and Moksha: E *lamo*, M *lama* 'many, a lot', E *alamo*, M *kərža*[5] 'not many, a few'.[6] The quantifiers and their declined forms were collected from the MokshEr-corpus. The MokshEr-corpus consists of newspaper and journal articles from the period 2002–2008. The Erzya subcorpus consists of ca. 2 785 000 words; the Moksha subcorpus contains ca. 1 742 000 words. The texts in the MokshEr-corpus are not annotated. Using the corpus material requires prior registration.

Table 2 and 3 provide information on the frequency of quantifiers in the corpus in each language. The tables show that plural-, definiteness- or possessive-marked forms are more frequent with the word stems E *lamo*, M *lama* 'a lot' than with E *alamo*, M *kərža* 'a few' and their overall numbers are also higher. Furthermore, the quantifiers with the definite plural ending, E *lamot'ńe*, M *lamət'ńä*, decline for case in both languages.

Table 2. The frequency of the Erzya quantifiers in the MokshEr-corpus

Quantifier	Occurrences
lamo 'many, a lot'	8268
lamo+t [many + PL]	695
lamo+t'+ńe [many + PL + DEF]	463*
lamo+ś [many + DEF]	110
alamo 'not many, a few'	1381
alamo-t'-ńe [not many + PL + DEF]	14*

* Includes forms with case markers attached

[5] An anonymous reviewer has pointed out that there is also the quantifier *af lamńa* 'not many, not much' In Moksha. This quantifier occurs rarely in the MokshEr-corpus; therefore, it was not included in the analysis.
[6] The dataset of this article is available at: 10.5281/zenodo.15631643

Table 3. The frequency of the Moksha quantifiers in the MokshEr-corpus

Quantifier	Occurrences
lama 'many, a lot'	4161
lamə+c [many + POSS.3SG]	532
lamə+t'+ńä [many + PL + DEF]	351*
lamə+ś [many + DEF]	93
lamə+c+ńä [many + POSS.3SG + DEF.PL]	41*
kərža 'not many, a few'	802

* Includes forms with case markers attached

Most frequently, the quantifiers occur in their basic form, but they can also be recategorized as nouns and decline in case and number, attested in different declension types. The possessive declension of the quantifiers is attested only in Moksha. Apart from *laməc* and *laməćńä*, included in Table 3, the corpus also contains a few matches of the forms with possessive suffixes attached: *lamə-sna* [many-POSS.3PL] and *lamə-n-c* [many-GEN-POSS.3SG]. The form *lamə-c* [many-POSS.3SG] is used in a plural meaning in Moksha, despite the 3rd singular possessive suffix (Alhoniemi 1992: 13). Furthermore, the plural marker of the definite declension of the nominal conjugation *-ńä* can be attached to *laməc*: *lamə-c-ńä*.[7] However, the corpus data show that *laməcńä* is not used in the literary languages as frequently as *lamət'ńä*. The markers used with the quantifiers might have changed over time, since in Alhoniemi's (1992: 14) material the form *lamə-c-ńä* is more frequent than *lamə-t'-ńä* [many-PL-DEF].

4 Quantifier constructions in Mordvinic

In this section, we focus on three construction types with quantifiers: (i) adnominal quantifier constructions, (ii) partitive constructions, and (iii) quantificational clauses. The relationship of the quantifier and the quantified noun are different in the three construction types. In

[7] In Moksha, the possessive suffix *-c* with the plural definite marker *-ńä* is also attested on other word classes, like pronouns and numerals, e.g., *fin**cńä*** 'some, ones (of them)', *ombon**cńä*** 'others' (Alhoniemi 1992: 14). According to Imârekova (2000: 100), the possessive suffix expresses collective meaning with numerals, e.g., *kolmə-nc-ńä* [three-POSS.3SG-DEF.PL] 'the three of them'. Thus, this form implies a definite superset, of which a subset is indicated by the pronoun or the numeral. In contrast to *laməcńä*, pronouns and numerals also have the suffix *-n* preceding the possessive marker that probably originates from an instructive ending (Serebrennikov 1967: 121), compare *kolmə-**nc**-ńä* and *lamə-**c**-ńä*.

adnominal modification, the noun can be considered the head, while the quantifier is an attribute. In partitive constructions, the quantifier has nominal features and serves as the head, and the quantified noun functions as its complement. In quantificational clauses, the relationship of the quantifier and the quantified noun is ambiguous: both can be considered as arguments of the verb, while the quantifier and the noun form a semantic bond with each other. The quantifier selects different forms in the three construction types, as shown in Charts 1 and 2.

Chart 1. The form of the quantifier in adnominal modification, partitive constructions, and quantificational clauses in Erzya

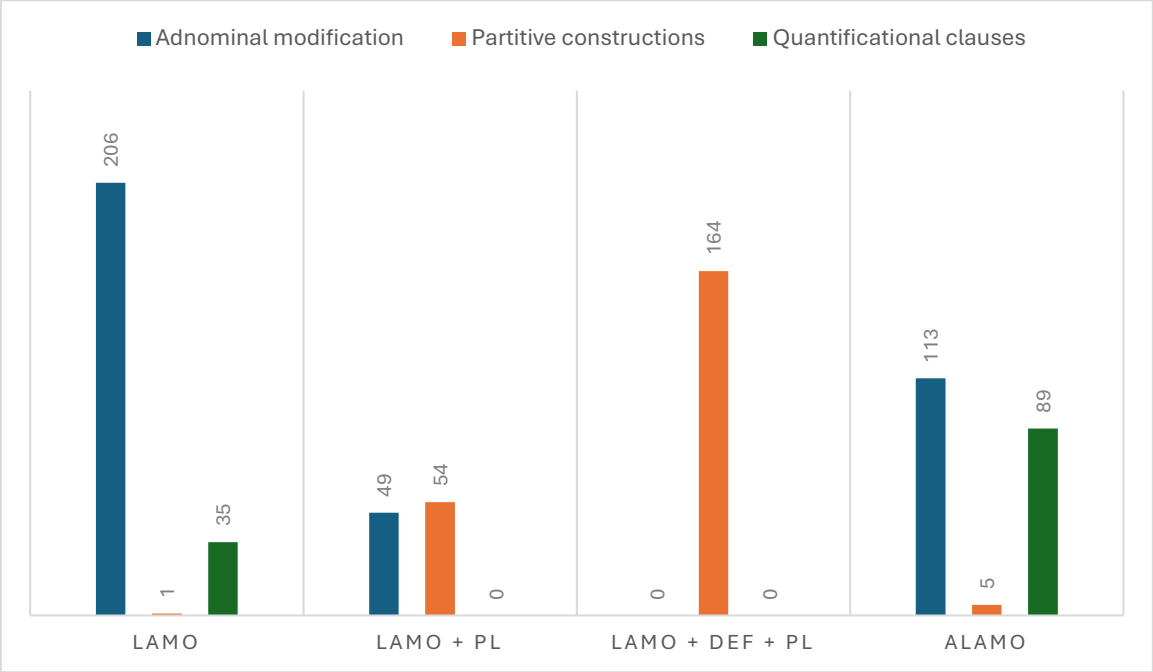
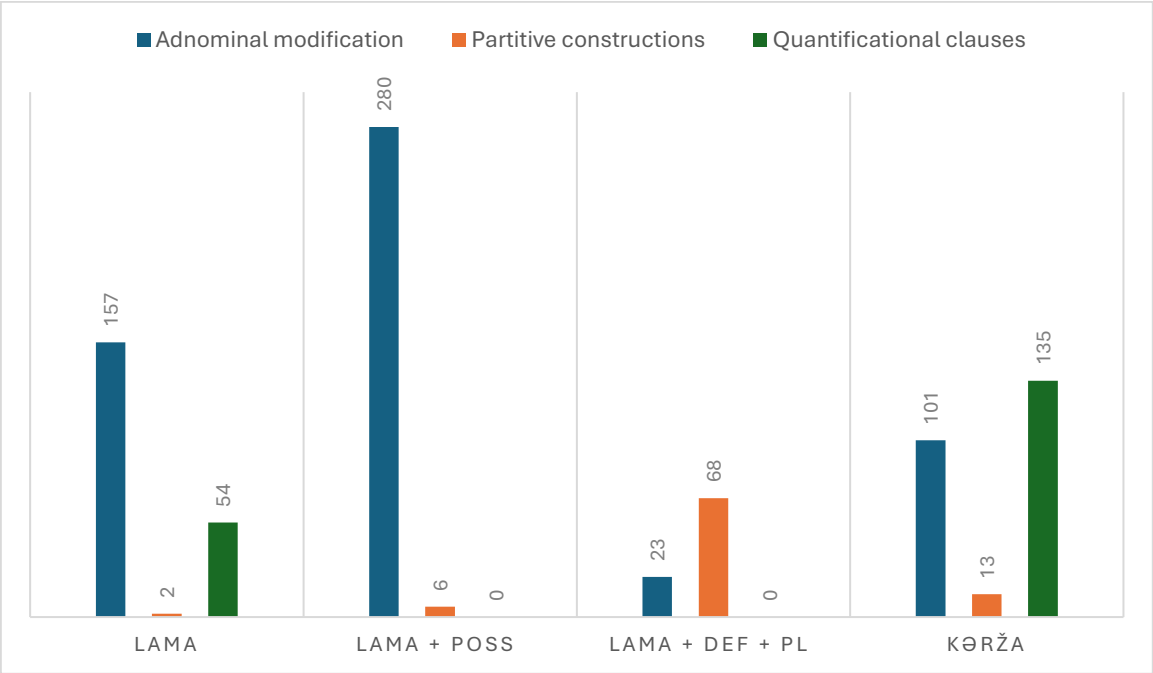


Chart 2. The form of the quantifier in adnominal modification, partitive constructions, and quantificational clauses in Moksha



Both languages use the basic form of the quantifiers most frequently in adnominal modification and in quantificational clauses, whereas quantifiers tend to be declined in case and number in partitive constructions. The only exception is the Moksha quantifier with the possessive ending *laməc*, which is most frequently used as an adnominal modifier.

4.1 Adnominal modification

Quantifiers behave like most adnominal modifiers in that they precede the noun and do not agree with their heads. Between the head and the quantifier, there can be other modifiers, e.g., adjectives and participles. The head noun declines in the case according to its syntactic functions. The nominative-separative variation is attested only in Moksha in those syntactic positions in which the noun is expectedly in the nominative case: as subjects, indefinite objects and as time adverbials.

As Charts 1 and 2 show, most frequently the basic form of the quantifier is used in adnominal modification; in Moksha, the form with the possessive ending is also quite frequent in this function. Since the nominative vs. separative variation is attested only in Moksha, but not in Erzya, the two languages are considered in separate subsections, 4.1.1 and 4.1.2 respectively.

4.1.1 Adnominal modification in Erzya

In Erzya, the case marking is assigned according to the function of the noun. Nouns functioning as subjects, indefinite objects and object-like time adverbials are in the nominative case, even when they are modified by a quantifier. Therefore, in adnominal quantifier construction, the quantifier does not influence the case marking of the head noun. Table 4 shows the marking of the noun with quantifiers used as modifiers. In the table, we divide the nominative and the oblique marking of nouns with different quantifiers.

Table 4. The case and number marking of the noun with quantifier modifiers functioning as subjects, indefinite objects, and time adverbials in Erzya

Case marking	Declension type	Number marking	*lamo*	*lamot*	*alamo*
Nominative	Basic	SG	22	-	12
		PL	100	15	30
	Definite	SG	1	-	-
		PL	16	19	-
	Possessive	N/A[8]	12	-	1
Oblique	Basic	N/A	35	-	67
	Definite	SG	-	-	1
		PL	18	14	1
	Possessive	N/A	2	1	1

As Table 4 shows, Erzya prefers plural marking over singular with quantifiers, although there is some variation. The plural form of the quantifier *lamo*, i.e., *lamo-t*, can be used both as a noun and as a modifier. The verb agrees in number with the noun when the NP with the quantifier serves as subject. Uncountable nouns that denote a substance or an abstract concept are in singular, as in (8).

(8) Erzya

Umok	*t'e*	*ul'ńe-ś,*	*śe*	*ška-sto-ńt'*	*saje-ź*	*Sura-ńt'*
long.ago	this	be-PST1.3SG	that	time-ELA-DEF	take-CVB	PN-DEF.GEN

ez-ga ***lamo*** ***ved'*** *čud'e-ś*.

[8] In Erzya, singular and plural possessee can be distinguished only with 1SG and 3SG possessors (Bartens 1999: 100; Hamari & Ajanki 2022: 402).

PP-PROL much water flow-PST1.3SG
'This was long ago, since then, a lot of water has flowed on the Sura River.' [MokshEr A767, EP-2006_1-ijun_12b]

In contrast, countable nouns are in the plural with the quantifiers (9–10). Subjects in the plural also require plural marking on the verb, as in (10).

Erzya

(9) *Ťe-ste Žeńa kudo-v kučńe-ś* ***lamo*** ***śorma-t***.
this-ELA PN house-LAT send-PST1.3SG much letter-PL
'From here, Zhenya sent many letters home.' [MokshEr A602, EP-2005_21-aprel_11]

(10) *Sod-an, kize-ń ška-sto-ńt'* ***lamo*** ***stud'en-t-ne***
know-PRS.1SG summer-GEN time-ELA-DEF much student-PL-DEF

majśi-t' t'ev-t'eme vel'e-se.
suffer-PRS.3PL work-ABE village-INE
'I know, in summertime many students suffer without work in the village.' [MokshEr A1795, EP-2007_27-sentjabr_12b]

In the corpus, the marking of some nouns varies. Especially the nouns *vij* 'strength' and *mel'* 'mind, mood, spirits' are attested both in singular and in plural. According to our observations, the choice in number affects the semantics of the noun. For instance, the polysemous noun *mel'* 'mind' is interpreted as 'attention' (uncountable, singular marking) in (11a) and 'opinion' (countable, plural marking) in (11b).

(11) Erzya

a. ***Lamo*** ***mel'*** *škola-so-ńt' javo-v-i eŕźa-mokšo-ń*
much mind school-INE-DEF divide-PASS-PRS.3SG Erzya-Moksha-GEN

fol'kloro-ńt'eń.
folklore-DEF.DAT
'A lot of attention is paid in the school to the Erzya-Moksha folklore.' [MokshEr A1575, EP-2007_15-nojabr_3a]

b. *Jovta-źe-l'-t'* ***lamo*** ***mel'-t'***, […]
tell-PTCP-PST2-3PL much mind-PL
'Many opinions were told […]' [MokshEr A2661, Syatko-2008_1_102-1059]

The form *lamo-t* [many-PL] is also used as adnominal modifier, cf. (12). Hamari & Ajanki (2022: 420) mention that while adnominal modifiers do not usually agree with the head noun in number, some adjectives, like *paro* 'good', have the tendency to do so. The difference between the singular and the plural quantifier is that *lamo* is attested with both countable and uncountable nouns, while *lamo-t* [many-PL] only with countable ones, which is expected, since only countable nouns take plural marking with quantifiers.

(12) Erzya
Lamo-t ***rajon-t-ne*** *eś* *programma-st* *anokst-iź*
many-PL region-PL-DEF own program-POSS.3PL prepare-PST1.3PL>3PL

eŕźa-ń-mokšo-ń *kel'-se*.
Erzya-GEN-Moksha-GEN language-INE
'Many regions prepared their own programs in the Erzya-Moksha language.' [MokshEr A1683, EP-2007_22-nojabr_4c]

4.1.2 Adnominal modification in Moksha

In Moksha, the quantified noun can be considered the head of the NP in most cases, although the quantifier can also acquire head-like features and govern the case marking of the noun. It is not always easy to determine the function of the quantifier and the noun: while in most of the cases, the quantifier functions as a modifier and the noun as the head of the NP, the quantifier can also assign the ablative case ending to the noun, in which case it should be interpreted as the syntactic head. Both the nominative and the ablative cases are attested with the basic forms of the quantifiers *lama* and *kərža* in this function, but not with *laməc*, see Table 6.

Table 6. The case marking of the NP with the quantifier in Moksha

	Declension type	Number marking	*lama*	*laməc*	*kərža*
Nominative	Basic	SG	72	-	65
		PL	5	1	1
	Definite	PL	1	134	1
	Possessive	N/A[9]	3	26	1

[9] In Moksha, the number of the possessed cannot be distinguished with plural possessors (see e.g., Bartens 1999: 100–101).

Ablative	Basic	N/A	32	-	25
	Possessive	N/A	-	-	1
Oblique	Basic	N/A	38	12	5
	Definite	PL	3	83	1
	Possessive	N/A	3	24	1

As Table 6 shows, both the nominative and the ablative cases are used with quantifiers as adnominal modifiers in Moksha. When the quantifier occurs in its basic form and the quantifier construction functions as subject or indefinite object, the nominative case is more frequent. Based on the material collected, the noun is in the nominative when it functions as an object-like time adverbial, as in (13). Furthermore, when the quantifier is followed by a relative clause that serves either as a subject or an indefinite object, the relative pronoun is in the nominative, as in (14); therefore, no variation occurs in this position between the nominative and separative strategies.

Moksha

(13) *Marija Afanaśjevna* ***lama*** ***kiza*** *trud'enda-j* *škola-sa*.
PN PN many year work-PRS.3SG school-INE
'Maria Afanas'evna has worked in the school for many years.' [MokshEr A1246, MP-2005_28-ijul_3]

(14) *Ťäńi śä ping-t'* ***kərža*** ***kijä*** *mäl'äft-si*.
now that time-DEF.GEN few who remember-PRS.3SG>3SG
'Now there are only a few who remember that time.' [MokshEr A1163, MP-2005_16-ijun_11b]

The variation between the ablative and nominative cases occurs when the NP functions as either subject (15) or indefinite direct object (16), and the quantifier modifies a unit with a noun that is not a relative pronoun. Both countable and uncountable nouns occur in either of the cases. (15) illustrates the case variation of animate subjects in the nominative (15a) and in the ablative (15b), while (16) illustrates inanimate objects in the nominative (16a) and in the ablative (16b).

Moksha

(15) a. *Ńižńäj* *Novgorod-sta* *Moskuv-u* *mol'əmbačk* *jotkə-zə-st*
PN PN-ELA PN-LAT while.going among-ILL-POSS.3PL

suvśə-ś *kol'* ***śada*** ***lama lomań***.
enter-PST1-3SG even CPR many person
'While going from Nizhny Novgorod to Moscow, even more people joined them.' [MokshEr A561, Moksha-2005_1-2_239-242]

b. […] *mokš-eŕźä-ń* *śekćijä-ś* *śembə-da* *eŕəkśə-l',* *toza*
Moksh-Erzya-GEN section-DEF all-ABL busy-PST2.3SG there

sašəńd'-ś ***śembə-da*** ***lama śt'iŕ-da*** *i* ***ćora-da***.
come-PST1.3SG all-ABL many girl-ABL and boy-ABL
'[…] the MokshErzyan section was the busiest one, there came the most girls and boys.' [MokshEr A778, Moksha-2006_7_98-121]

(16)
a. *Ťä-nksa* *luvə-ńd'-ś* ***af*** ***kərža*** ***kńiga,*** […]
this-CAUS read-FRQ-PST1.3SG NEG little book
'Therefore, s/he read many (lit. not a few) books, […].' [MokshEr A904, Moksha-2007_3_91-95]

b. *Ťada* *mel'ä* *kulə-mə-zə-nza* *nolda-ś* *ńińgä*
this-ABL after die-NMLZ-ILL-POSS.3SG publish-PST1.3SG still

af ***kərža*** ***kńiga-da*** […]
NEG little book-ABL
'After this, s/he published not a few books until his/her death […]' [MokshEr A883, Moksha-2007_2_80-88]

Regarding number marking, Table 6 shows that the basic forms of the quantifiers prefer singular marking with slight variation, whereas the quantifier with the possessive suffix *laməc* requires plural marking, often together with definiteness markers on the noun, as in (17).

(17) Moksha
Lamə-c ***lomat'-t'-ńä*** *ul'-śt'* *ńi* *koml'ävńä-t* […]
many-POSS.3SG person-PL-DEF be-PST1.3PL already drunk-PL
'Many people were already drunk, […]' [MokshEr A1057, Moksha-2007_10_113-129]

All occurrences with a plural marked noun in the corpus with *lama* are attested with the noun *kiza* 'year', i.e., *lama kizə-t* [many year-PL] 'many years', in a similar context as the singular form in (13) above. These might be petrified constructions in the idiolect of some speakers.

Plural marking is less frequent with the quantifier *kərža*, attesting for only one such example (18) in our corpus. In (18), the noun *t'ev* ‘work’ is in plural, although the verb does not agree with it in number.

(18) Moksha
Sutka-ń-beŕf *eŕä-f-sə-nk* ***ul'eńd'-i*** *af* *kərža*
day-GEN-around live-PTCP-INE-POSS.1PL be-PRS.3SG NEG few

päk *eŕaviks* ***t'ef-t***…
very necessary work-PL
‘Around the day, there are many (lit. is not a few) very necessary things in our lives...’
[MokshEr A266, Mokshen_pravda-2004-8_16]

4.2 Partitive constructions

In this paper, the *partitive constructions* are understood according to Koptjevskaja-Tamm’s terminology (2001: 526–527). Semantically, partitive constructions, unlike plain quantification, involve proportional quantification, i.e., “partitive nominal constructions involve a presupposed set of items referred to by one of the nominals […] and the quantifier indicates a subset which is selected from it” (Koptjevskaja-Tamm 2001: 527).[10]

Partitive constructions in Mordvinic are syntactically different from plain quantification. In plain quantification, the quantifier modifies the head NP. The structure of partitive constructions involves two nouns; thus, quantifiers are recategorized as nouns. Quantifiers in partitive constructions are attested most frequently in the definite declension plural (see Chart 1 and 2). In partitive constructions, the quantifier serves as the head, whereas the quantified noun serves as the complement of the quantifier, subordinated to the quantifier.

The noun that expresses the superset of partitive constructions is frequently encoded with a separative case or with postpositions. Henceforth, we will focus on the marking of the superset in partitive constructions. We consider the marking strategies of Erzya and Moksha in Sections 4.2.1 and 4.2.2 respectively.

[10] Seržant (2021: 884–885) refers to such structures as *true-partitive constructions*: “A true-partitive relation obtains when there is a subset-superset relationship between two sets (with mass nouns: two portions) of the same kind”.

4.2.1 Partitive constructions in Erzya

In Erzya, four strategies are applied in marking the superset, as shown in Chart 3. The noun can be marked either with the ablative or the elative case, or it can be in a postpositional construction. Postpositional constructions involve either the elative-marked postposition *ej-ste* [PP-ELA] 'from' or the postposition *jutko* 'among' in inessive (*jutk-so*) or elative (*jutk-sto*).

Chart 3. Marking the superset with different quantifiers in Erzya

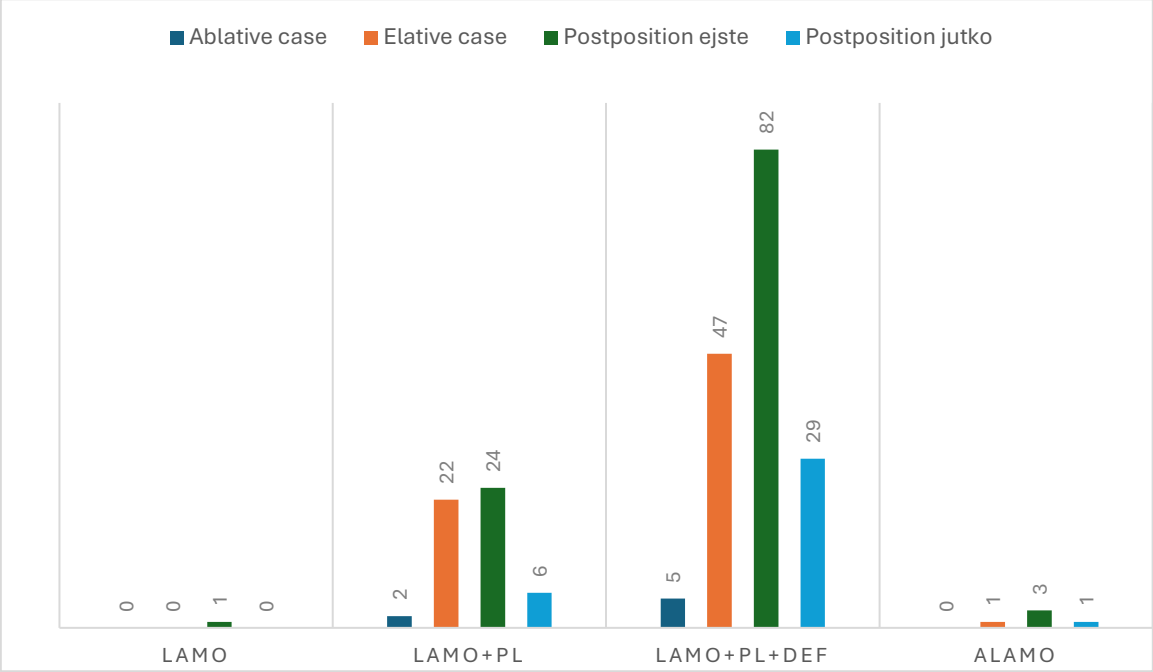


Chart 3 shows that Erzya prefers the elative ending in marking the superset, expressed with the definite elative case ending (19), or, more frequently, with the postposition *ejste* (20). Among the postposition *jutkso* and *jutksto* (21), the latter is more frequent in our data sample.

Erzya

(19) ***Lamo-t*** ***narmun-t'ńe-ste*** *tujekšńe-śt'* *l'embe* *mastoro-v.*
many-PL bird-PL.DEF-ELA leave-PST1.3PL warm land-LAT
'Many of the birds leave for warm lands.' [MokshEr A0, Syatko-2003-2-1]

(20) ***Lamo-t'-ńen'*** ***ej-ste-st*** *avtoro-ś*
many-PL-DEF.GEN PP-ELA-POSS.3PL author-DEF

arś-ińźe-t'e-ińźe *soń=ś.*

think-PST1.3SG>3PL-make-PST1.3SG>3PL 3SG=EMPH
‘The author himself/herself invented many of those [words].’ [MokshEr A2781, Syatko-2008_5_97-103]

(21) *Lamo-t'ńe* ***va-ića-t'ńe-ń*** ***jutk-sto*** *ul'ńe-śt'* *iŕed'-ste*.
many-PL.DEF drown-PTCP-PL.DEF-GEN among-ELA be-PST1.3PL drunk-ADV
‘Many of the drowned [people] was drunk.’ [MokshEr A1752, EP-2007_27-dekabr_3b]

In Erzya partitive constructions, there is a variation between the ablative and the elative cases, and the elative case is used more frequently in our material. Semantically partitive constructions are close to the concrete separative meaning (see Luraghi & Kittilä 2014: 50). The ablative case is attested more restrictedly and often – though not exclusively – with personal pronouns, as in (22). Personal pronouns are not declined in the elative case, though reference to person can also be expressed with the postposition *ejste* and a personal pronoun in the genitive case or with possessive suffixes (see Section 2.1 for more details on the *e-/ez-* postpositions).

Erzya
(22) *Internet śiśt'ema-ńt'eń* *vejseńd'avo-ź* *382* *škola-t,*
internet system-DAT.DEF unite-PTCP.PST NUM school-PL

siń-d'e-st *śeht'e* ***lamo-t'ńe*** – *vasolo* *vel'e-t'ńe-se*.
3PL-ABL-POSS.3PL SPRL many-PL.DEF far village-PL.DEF-INE
‘In the internet system, 382 schools are united, and most of those are in villages far away.’ [MokshEr A1161: EP-2006_23-fevral_4c]

While in partitive constructions, the quantifier can be considered the head and the quantified noun (that expresses the superset) the complement of the quantifier, this analysis is not unproblematic in light of the data. The nominal declension of the quantifier and the case marking according to the syntactic role of the whole phrase support this assumption. Nevertheless, the quantifier does not fulfill all criteria of subjecthood, as shown in (23), in which the verb indexes the complement noun instead of the head in Erzya.

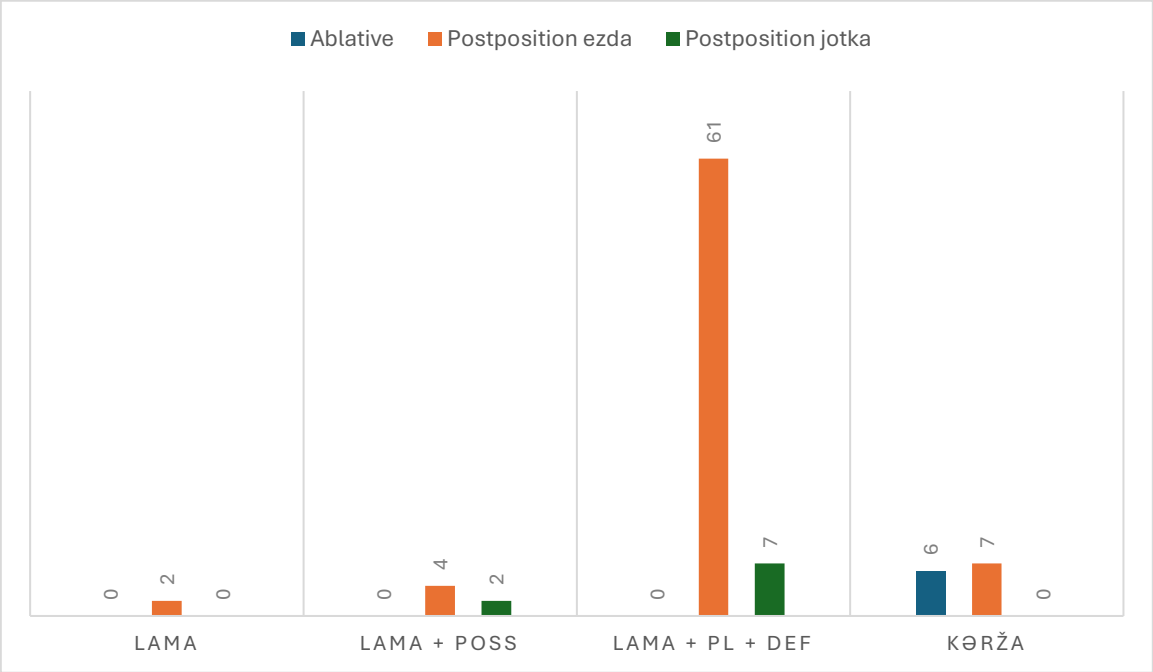
(23) Erzya
Mińek ***ej-ste=jak*** *lamo-t'ńe* ***put-ińek*** *vel'e-s* *kudo-t,*
1PL.GEN PP-ELA=ADD many-PL.DEF put-PST1.1PL village-ILL house-PL

tŕa-tano *rakša-t,* […]
feed-PRS.1PL cattle-PL
'Also, many of us has built houses in the village, feeds cattle, […] [MokshEr A226, EM-257.2007a]

4.2.2 Partitive constructions in Moksha

Moksha partitive constructions are structurally similar to the Erzya ones. The quantifier serves as the head and declines in case according to the syntactic function of the NP in the sentence. The complement noun can be marked with three different strategies: the ablative case, the postposition *ez-da* [PP-ABL] 'from', and the postposition *jotka* 'among' either in the elative (*jotk-sta*) or in the inessive case (*jotk-sa*). The distribution of the marking strategies with the different forms of the quantifiers is shown in Chart 4.

Chart 4. The marking of the superset in Moksha with different quantifiers



Since Moksha does not use synthetic forms in the definite declension, it prefers the postpositional strategies on all occasions in partitive constructions. The most frequently used one is the postposition *ezda* (24). Furthermore, the postposition *jotka* 'among', a cognate of Erzya *jutko*, is also attested in the data (25).

Moksha

(24) ***Lamə-t'ńä*** ***mokšə-t'ńə-ń*** ***i*** ***eŕźä-t'ńə-ń*** ***ez-da***
many-PL.DEF Moksha-PL.DEF-GEN and Erzya-PL.DEF-GEN PP-ABL

jakśə-ʟ't' *kal-s*.
go-PST2.3PL fish-ILL
'And many of the Mokshas and Erzyas had been going fishing.' [MokshEr A1056, Moksha-2007_10_95-110]

(25) ***Miń*** ***jotk-stə-nk*** *lamə-c* *jug-u* *jaka-j*.
1PL among-ELA-POSS.1PL many-POSS.3SG south-LAT go-PTCP
'Among us, there are many who travel to the south.' [MokshEr A553, Moksha-2005_1-2_147-154]

The ablative case is used in the material only in the possessive declension, as in (26).

(26) Moksha
Spirt-tə-nk ***kərža*** *il'äd-ś*.
spirit-ABL-POSS.1PL little to.be.left-PST1.3SG
'Only a little of our spirits is left.' [MokshEr A507, Moksha-2003_4_15-64]

In Moksha, similarly to Erzya, the verb can index the complement noun in partitive constructions, as in (27).

(27) Moksha
Lamə-t'ńä ***ez-də-nk*** *raznaj* *tuftal-s* *koŕä* ***kadə-śk*** *rodnoj*
many-PL-DEF PP-ABL-1PL different reason-ILL because leave-PST1.1PL>3PL birth

vastə-ńä-ńkə-ń, […]
place-DIM-POSS.1PL-GEN
'Many of us leave our birthplace because of different reasons, […]' [MokshEr A1294, MP-2005_30-ijun_7]

The Moksha partitive constructions represent the asymmetries of the declension paradigm. When it is necessary to express definiteness in partitive constructions, Moksha uses either the possessive declension paradigm or postpositions, since there are no available synthetic forms in the separative cases of the definite declension.

4.3 Quantificational clauses

Quantifiers can behave like adverbs and form a closer bond with the predicate syntactically. Semantically, the function of the quantifier is to assign a quantity to the noun. Quantification

can thus be expressed on the clause level in the Mordvinic languages. The syntactic relations in these clauses are complex since the quantifier and the quantified noun are separated and seemingly both have argument status. Semantically these clauses express two predications at the same time: the existence of some entity and its quantity. We call these constructions *quantificational clauses*, exemplified in (28–29).

Moksha
(28) *A* *Boraž-sa* *od* ***kud-ta*** *mekəl'd'ə-ń* *kizə-t'-ńəń*
and PN-INE new house-ABL last-GEN year-PL-DEF.GEN

strojśə-v-i *päk* ***kərža***.
build-PASS-3SG very little
'And in Boraž, very few new houses have been built during (more) recent years.' [MokshEr A1158, MP-2005_16-ijun_8]

(29) *I* ***šuft-tə=vək*** *oza-f-ńə-ś* ***af*** ***kərža*** […]
and tree-ABL=ADD sit-CAUS-FRQ-PST1.3SG NEG little
'And he even planted plenty of trees […]' [MokshEr A957, Moksha-2007_6_26-36]

In quantificational clauses, only the subject or the object can be quantified. In intransitive clauses, the subject is quantified (28), whereas in transitive clauses – the object (29).

Quantificational clauses have been discussed in previous literature on Mordvinic as a non-verbal predicative construction, in which the quantifier serves as the predicate and characterizes the subject referent regarding its quantity (see Ajanki et al. 2022; Alhoniemi 1982b; Bartens 1996: 40–41). Our data, however, suggest that it is also necessary to include transitive and intransitive clauses in which a similar semantic relationship between the quantifier and the noun is expressed. Here, non-verbal clauses are considered to be a subtype of intransitive clauses. Non-verbal clauses are the most frequent in our material, with over 70 % of quantificational clauses belonging to this type in both languages.

Similar quantificational constructions are attested in related languages, e.g., in Finnish (Hakulinen & Karlsson 1979: 97–100; Hakulinen et al. 2004: § 902) and in contact languages, e.g., in Russian (Švedova et al. 1980: 335–336). In both Finnish and Russian, these clauses have a distinctive feature in coding the NP. In Finnish, the NP is encoded with the partitive case, while in Russian, the NP is in the genitive plural (for a comparison, see Leinonen 1984).

Mordvinic languages display variation in quantificational clauses as opposed to Finnish and Russian, since the encoding of the NP is not fixed: it can be marked either with the nominative cases or with the separative strategy.

For the purposes of our paper, it is important to differentiate quantificational clauses, since a quantified noun can have a different marking in them than it would in plain quantification. In quantificational clauses, nouns are often marked with the separative strategy in both languages. The case markers for subject and indefinite objects are compared in Table 7 between plain quantification and quantificational clauses. Table 7 includes data only of the undeclined form of quantifiers, namely E *lamo* 'many, a lot', *alamo* 'not many, a few', and M *lama* 'many, a lot', *kərža* 'a few, a little'.

Table 7. Comparing the frequency of the nominative vs. separative strategy in adnominal modification and quantificational clauses

	Erzya		Moksha	
	Adnominal modification	Quantificational clauses	Adnominal modification	Quantificational clauses
Nominative strategy	194	64	149	24
Separative strategy	0	59	58	164

Analyzing the syntactic structure of the Mordvinic quantificational clauses is not unproblematic, especially when the noun is marked with the separative strategy. Similar problems arise in the quantificational sentences of Finnish and Russian, where either the quantified noun or the quantifier is considered the subject and object of the sentence (see Leinonen 1984 for a discussion). The present paper cannot provide a detailed analysis of the structure of this clause type in the Mordvinic languages, due to its scope and the restricted amount of data on this sentence type. Identifying this clause type is, nevertheless, essential for our study to explain the case variation in quantifier constructions in the Mordvinic languages. Marking strategies of the noun are discussed in Section 4.3.1 for Erzya and in 4.3.2 for Moksha.

4.3.1. Quantificational clauses in Erzya

In Erzya, most quantificational clauses belong to the non-verbal subtype. In non-verbal quantificational clauses, the quantifier serves as the predicate and can be inflected (see Hamari & Ajanki 2022: 423). In Erzya quantificational clauses, the distribution of the separative and the nominative strategies is almost the same, see Table 8.

Table 8. The case and number marking of the noun in quantificational clauses

Case or postposition	Declension type	Number marking	*lamo*	*alamo*	The distribution of case-markers
Nominative	Basic	SG	4	14	64
		PL	4	13	
	Definite	SG	3	10	
		PL	1	4	
	Possessive	N/A	5	6	
Ablative	Basic	N/A	-	1	59
	Definite	SG	3	1	
		PL	14	35	
	Possessive	N/A	-	2	
Postposition *ejste*			1	2	

In Erzya, definiteness marking plays a role in the marking of the noun and the information flow of the sentence. Indefinite nouns are attested in the nominative case, as in (30–31). The quantifier is topical in these sentences and precedes the verb.

Erzya

(30) *Pek* *rizne-vt'-i* *śe* *tuvtalo-ś,* *vel'e-se-ńt'* ***alamo***
very grieve-CAUS-PRS.3SG that reason-DEF village-INE-DEF few

čač-it' ***ejkakš-t***.
born-PRS.3PL children-PL
'[We] grieve about the reason that few children are born (Lit. a few is born of children) in the village.' [MokshEr A851, EP-2006_4-maj_6a]

(31) *Od* ***lomań-t'=kak*** *ńej* ***lamo*** *s-it'*.
young person-PL=ADD now many come-PRS.3PL

‘[In A. M. Sun’ajkina’s field almost all workers have worked for more than five years, some have worked for more than 25 years …] Even many young people come (here to work) now.’ [MokshEr A1791, EP-2007_27-sentjabr_11a]

The variation between the nominative and separative strategy only occurs with nouns marked for definiteness or those with a definite referent, e.g., personal pronouns. These nouns are topical and are often raised to a sentence-initial position. The quantifier follows the verb in these sentences. We did not attest considerable differences between the marking strategies of nouns; thus, further research is necessary. In our material, the noun often preserves the case marking assigned to it by its syntactic function: subjects are in the definite nominative (32), while objects are attested in the definite genitive case (33).

Erzya
(32) *Mongoloidnoj* ***veŕe-ś*** *mińek* *san-tne-se* *l'ija*
Mongoloid blood-DEF 1PL.GEN vein-PL.DEF-INE other

finne-ń-ugra-ń *narod-tne-ń* *koŕas* *pek* ***alamo***.
Finn-GEN-Ugric-GEN nation-PL.DEF-GEN according very few
‘There is less Mongoloid blood in our veins than in that of other Finno-Ugric nations.’ [MokshEr A1082, EP-2006_18-maj_6a]

(33) *Śeks* ***lovso-ńt'=kak*** *maks-i* ***alamo,*** *śeke-ń* *van-t,*
therefore milk-DEF.GEN=ADD give-PRS.3SG little that-GEN look-IMP.2SG

kul-i.
die-PRS.3SG
‘And that is why she doesn't give much milk, just wait and see, she's going to die.’ [MokshEr A8, Syatko-2003-3-8]

Table 8 shows that among the separative strategies, the plural ablative case is the most frequent in quantificational sentences. We also observed that the separative strategy correlates with definiteness in the data sample we used. The ablative can mark both subjects (34) and objects (35) and it can be attached to personal pronouns (36) as well.

Erzya
(34) *Estono-ń* *kel'-se* *kort-ića* ***tonavt'ńića-t'ńe-d'e*** *kavkśt'*
Estonian-GEN language-INE speak-PTCP student-PL.DEF-ABL twice

śed'e ***alamo***.
CPR few

‘The number of Estonian speaking students is half that much.’ [MokshEr A1608, EP-2007_16-avgust_4f]

(35) *Ťe* *śemija-so-ńt'* ***t'ikše-t'ńe-d'e*** *taštakšn-it'* *pek* *di* *pek*
this family-INE-DEF herb-PL.DEF-ABL collect-PRS.3PL very and very

lamo.
many
‘In this family, they really collect a lot of herbs (lit. of herbs, they collect very many)’ [MokshEr A2346, Syatko-2006_5_105-127]

(36) *Ańśak* *mejel'će 10* *ije-t'-ńe-ń* *peŕt'* ***siń-d'e-st***
only last NUM year-PL-DEF-GEN during 3PL-ABL-POSS.3PL

karma-śt' *2* *tišča-do* *śed'e* ***alamo***.
start-PST.3PL 2 thousand-ABL CPR few
‘Only during the last 10 years their numbers have dropped by two thousands.’ [MokshEr A661: EP-2005_24-mart_15a]

In sentences like (34–36) it is difficult to determine which of the participants is the argument of the verb and what is the syntactic function of the quantifier. The quantified noun is marked with an oblique case that is not attested in either subject or object position, unless there is a quantifier also present in the sentence. The case assigned to the noun is also different from the case government used in plain quantification (see Section 4.1.1). On the other hand, the quantifier cannot be analyzed as a noun, since is not declined in case and number according to its syntactic position as in partitive constructions (see Section 4.2.1).

A possible explanation for the spread of the separative strategy in quantificational clauses is that they share certain similarities with partitive constructions. In both construction types, the quantifier can be analyzed as an argument of the verb and the quantified noun is optional for the structure to be grammatical. The difference between the two structures is that the quantifier declines in case and number, i.e., it is recategorized as a noun in partitive constructions, whereas it is in its basic form in quantificational clauses. Problems arise in the classification of different structures, discussed in more detail in Section 5.

4.3.2. Quantificational clauses in Moksha

In Moksha, we attested quantificational clauses more frequently than in Erzya, especially with the quantifier *kərža* 'few'. Table 9 illustrates the marking of nouns in Moksha quantificational clauses, which shows a clear preference towards the separative strategy in this clause type.

Table 9. The marking of the noun in quantificational clauses

Case or postposition	Declension type	Number marking	*lama*	*kərža*	Distribution of the nominative and separative cases
Nominative	Basic	SG	2	12	24
		PL	-	1	
	Definite	SG	3	3	
	Possessive	N/A	1	2	
Ablative	Basic	N/A	34	97	164
	Possessive	N/A	12	18	
Postposition *ezda*			2	1	

In Moksha quantificational clauses, the noun is most frequently used in the basic ablative case, in both subject (37) and object (38) positions. As Moksha does not have synthetic forms in the definite declension in oblique cases, definiteness markers are often left unexpressed (Kaškin 2018: 129–136). Rueter & Kabaeva (2023: 118–120) also shows that nouns in Moksha are in the basic declension in the same contexts where Erzya would use the definite declension.

Moksha

(37) ***Ťäšt'-ta*** *t'äči* ***kərža***.
star-ABL today few
'Today there are few stars.' [MokshEr A13, Moksha-2002_14]

(38) […] ***kərža*** *ńäjəńd'-äń* *eś* *käl'-sa* ***kńiga-də=nga***.
few see-PRS.1SG own language-INE book-ABL=ADD
'[…] I see also a few books in my language.' [MokshEr A364, Mokshen_pravda-2004-10_37]

The postpositional construction is used in our data sample when the referent was mentioned in the immediate context, as in (39). The possessive suffix on the postposition *ezda* in (39) anaphorically points at the referent mentioned in the immediate context.

(39) Moksha
Lopa-t'ńä jomla-t i ***ez-də-st*** ***kərža***.
leave-PL.DEF small-PL and PP-ABL-POSS.3PL few
'The leaves are small and there are few of them.' [MokshEr A25, Moksha-2002_26]

Possessive marking is also common with the separative strategy: the possessed is in the ablative case, and the quantifier characterizes the quantity of the possessed item, as in (40).

(40) Moksha
Da i ***kizə-də-nzə=vək*** *śt'iŕ-t'* ***lama*** *ńi*.
and and year-ABL-POSS.3SG=ADD girl-DEF.GEN many already
'And the girl is many years old already (lit. of years, too, the girl has many already).'
[MokshEr A129, Moksha-2005_12]

The nominative case is attested only on a couple of occasions with non-dividable nouns. In the case of non-dividable nouns, the quantifier assigns the size of the noun instead of its quantity. Demonstrative pronouns are in the nominative, as in (41). Furthermore, some common nouns, e.g., 'salary' in (42), are also attested in the nominative case.

Moksha
(41) *Ťä af kərža*.
it NEG few
'This is not a small amount.' [MokshEr A36, Moksha-2002_37]

(42) *Zarplata-c kərža t'ejənza!*
salary-POSS.3SG few 3SG.DAT
'His/her salary is low for him/her!' [MokshEr A699, Moksha-2006_3_129-130]

Moksha prefers the separative strategy in quantificational clauses and the separative strategy does not correlate with definiteness marking. While Moksha uses the definiteness markers in semantically close partitive constructions, they are not obligatory in quantificational clauses, and unless the noun is mentioned in the immediate context, definite markers are often left unexpressed. The use of the basic declension can be explained by the asymmetries of the declension paradigm of Moksha and its tendency not to mark definiteness in oblique cases.

5 Summary & Discussion

In this paper, we considered case variation in quantifier constructions in the Mordvinic languages and examined two competing marking strategies: the nominative and the separative strategy. The two closely related languages, Erzya and Moksha, use similar strategies on the one hand, but there are, in fact, considerable differences between their distribution. The marking strategies across different construction types are summarized in Table 10.

Table 10. Marking of the noun with quantifiers

Construction type	Marking of the noun	
	Erzya	Moksha
Adnominal modification (subjects and indefinite direct objects)	Nominative strategy Mass nouns: SG Countable nouns: PL	Nominative or separative strategy (ABL) The noun is usually in the singular
Partitive constructions	Separative strategy (ELA) Marked for definiteness	Separative strategy (postpositions) Marked for definiteness
Quantificational clauses	Nominative or separative strategy (ABL) Separative strategy correlates with definiteness marking	Separative strategy (ABL) No correlation between definiteness marking and the separative strategy

As Table 10 shows, there are considerable differences between Erzya and Moksha. In Moksha, the separative strategy has spread across quantifier constructions, while its use in Erzya is more restricted. In Erzya, the separative strategy is used in contexts in which the noun is also marked for definiteness or has a definite referent. In Moksha, on the other hand, definiteness markers are frequently omitted in oblique cases, and while nouns are obligatorily marked for definiteness in partitive constructions, there is no correlation between the separative strategy and definiteness marking elsewhere. Furthermore, Table 10 indicates that in Erzya there is a clear split between the use of the elative (partitive constructions) and the

ablative cases (quantificational clauses), whereas in Moksha postpositional constructions vs. the ablative case is used in these constructions.

So far, we have discussed three construction types in which quantifiers and nouns co-occur, and the nominal marking depends on the function of the quantifier. Quantifiers in Mordvinic have a wide variety of functions, and they can be used as adnominal modifiers, adverbs, or nouns. The function of the quantifier cannot always be differentiated, and there are also overlaps in the meanings that the quantifier expresses.

A feature of the quantifiers that has not been discussed so far is that quantifiers can stand on their own in both Erzya and Moksha. This does not lead to case variation, but it can explain some tendencies discussed in Section 4. Quantifiers as adverbs do not decline but can nevertheless fill the subject or object position in the sentence, expressing the quantity of implicit referents, as in (43), (see especially Alhoniemi 1992: 13–14).

(43) Erzya
Živ-ste *kado-v-kšno-št'* ***alamo***.
life-ELA leave-PASS-FRQ-PST1.3PL few
'A few was left alive.' [MokshEr A2855, Syatko-2008_9_92-108]

Furthermore, quantifiers can nominalize and decline in case and number according to their syntactic function, as in (44).

(44) Moksha
Lamə-t'ńä *śäŕäd'-ś-t'* *t'evlavə-ń* *urma-sa*.
many-PL.DEF get.sick-PST1.3PL lung-GEN disease-INE
'Many got sick with lung disease.' [MokshEr A942, Moksha-2007_5_94-98]

This ability of the quantifiers makes it possible for them to fill different functions in the sentence, even when the noun they quantify or express a part of occurs in the same sentence. For instance, in the partitive construction the quantifier serves as the head and the noun as a complement (see Section 4.2).

The use of separative cases in partitive constructions is not a new invention in the Mordvinic languages. Part-whole meaning can be considered clear evidence of separation (see Luraghi

& Kittilä 2014: 50), which is further supported by the results from the Erzya data, where the older separative case, ablative, is competing with the newer separative case, the elative.[11]

Koptjevskaja-Tamm (2001: 535–536) hypothesizes that in Finnish, ambiguous contexts between 'set' and 'kind' interpretations have led to the use of grammaticalization of the partitive case in non-partitive constructions. Data from the Mordvinic languages might support this hypothesis, as we found that it is often difficult to draw the line between partitive constructions and clauses that we label as *quantificational clauses* in this paper. In both construction types, the quantifier occurs as an argument of the verb and the noun can be considered a complement of the quantifier. In quantificational clauses, the quantifier assigns certain characteristics to the noun, whereas in partitive constructions, the quantifier expresses a part of the set referred to by the noun. Structurally, they are also slightly different since in partitive constructions, the quantifier behaves like a noun, similar to sentences like (44). In turn, in quantificational clauses, the quantifier behaves similarly to an adverb, and it occurs in its basic form, similar to sentences (43).

In contrast to structural characteristics, the semantic difference between the two constructions is not entirely transparent. A possible overlap of partitive constructions and quantificational clauses is shown in (45): the quantifier can express either that people got a part (that is more than a hectare) of a given field (part vs. whole), or that they got some arable land that is more than a hectare by area (characterization of the quantity). Thus, differentiating between partitive constructions and quantificational clauses is not always possible.

(45) Erzya
[…] *śed'ej-ška-va* *kunda-śt'* *kośmaj* *moda-ńt'* *mel'ga* *jaka-mo*
heart-COMP-PROL take-PST1.3PL arable land-DEF.GEN after go-INF

saj-śt' ***ej-ste-nze*** *gektar-do* ***lamo***.
get-PST1.3PL PP-ELA-POSS.3SG hectare-ABL many
'[…] warmheartedly, they started looking after the arable land and took more than a hectare of it.' [MokshEr A1585, EP-2007_15-nojabr_6a]

[11] The use of separative cases in 'part-whole' constructions is also widely attested in Eurasia, see e.g. Koptjevskaja-Tamm (2001: 557–560); Luraghi & Kittilä (2014: 54–55); Seržant (2021: 906–908).

Since the two constructions are close to each other semantically, it can explain the spread of the separative marking strategies to quantificational clauses. While Erzya and Moksha share the common feature that they both use the separative strategy, especially the ablative case, in quantificational clauses, which might imply that this is a common development in the two languages, the two constructions have different features in the two languages due to the differences in the declension paradigms thereof.

Finally, the lack of definiteness markers in Moksha quantificational clauses bring them close to plain quantification, where the noun serves as the head of the NP. Quantifiers behave very similarly in quantificational clauses and adnominal modification: they assign a quantity to the noun. The difference is rather structural, since in quantificational clauses the quantifier and the noun belong to different phrases, which is often reflected by word order on the surface structure. As word order is free in Moksha, quantifiers and nouns can also occur adjacently in quantificational clauses, as in (46). Since (46a) describes the event in the past tense and the quantifier gets the endings of the predicative inflection accordingly, it is clearly a quantificational clause. In the present tense however, there are no formal differences between the two constructions, and therefore, ambiguity arises, as shown in (46b).

(45) Moksha
a. *I* *meź-ś* *povəńd'-ś* *śel'mə-s,* *jotk-sə-st*
and what-DEF appear-PST1.3SG eye-ILL among-INE-POSS.3PL

lamə-l' *śäńgäŕä* ***pančf-ta***.
many-PST2.3SG blue flower-ABL
'And what caught the eye, among them there were many blue flowers (lit. among them blue flowers were many).' [MokshEr A25, Moksha-2002_26)]

b. *jotk-sə-st* ***lama*** *śäńgärä* ***pančf-ta***
among-INE-POSS.3PL many blue flower-ABL
'there are a lot of blue flowers among them' (constructed)

Thus, due to the lack of definiteness markers in Moksha quantificational clauses, the separative strategy has apparently started to spread to adnominal modification as well, where the nominative marking is more frequent. In Erzya, on the other hand, due to the correlation

of definiteness markers and the separative strategy, the use of the separative markers with quantifiers is more restricted.

In this section we have suggested a possible spread of the separative strategy across quantifier constructions in the Mordvinic languages. A similar explanation from a typological point of view is provided in Koptjevskaja-Tamm (2001) and in Luraghi & Kittilä (2014).

6 Conclusion

In this paper, we discussed case variation with the mass and paucal quantifiers E *lamo*, M *lama* 'many, a lot', E *alamo*, M *kərža* 'not many, a few'. The main focus of this paper is the distribution of the nominative vs. the separative strategies in Erzya and Moksha quantifier constructions. Our findings show that (1) there are considerable differences between the two languages and (2) the separative strategy is more widespread in Moksha than in Erzya.

The differences and similarities between the two closely related languages shed some light on the grammaticalization of the separative strategy in quantifier constructions. The spread of the separative strategy in Moksha can be explained by the lack of correspondence between definiteness markers and the separative strategy. On the other hand, due to this same correspondence the use of the separative cases is more restricted in Erzya. Our findings show that the common starting point for using the separative strategy with quantifiers can be found in partitive constructions, where the quantifier is the head of the NP, and the quantified noun is a complement of the quantifier.

A more elaborate understanding of definiteness and its correlation with separative markers and information structure is left for future studies. These features seem to differentiate quantificational clauses from plain quantification. Furthermore, considering quantificational clauses as their own clause type and examining them in more detail, especially comparing them to similar constructions of related and contact languages, might reveal more about the changes in the functions of case markers and the influence of language contacts on grammatical structures.

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Abbreviations

1	first person
2	second person
3	third person
ABE	abessive
ABL	ablative
ADD	additional particle
ADV	adverbial suffix
CAUS	causative case and causative derivational suffix
CPR	comparative
CVB	converb
DAT	dative
DEF	definite declension
DIM	diminutive
E	Erzya
ELA	elative
EMPH	emphatic particle
FRQ	frequentative
GEN	genitive
ILL	illative
IMP	imperative
INCH	inchoative
INE	inessive
INF	infinitive
LAT	lative
M	Moksha
NEG	negation
NMLZ	nominalizer
NOM	nominative
NUM	numeral
PASS	passive
PL	plural

PN proper name
POSS possessive suffix
PP postposition
PROL prolative
PRS present tense
PST1 first past tense
PST2 second past tense
PTCP participle
SG singular
SPRL superlative
TRSL translative

Data sources

MokshEr = *MokshEr -corpus v3.0 (Moksha, Erzya)*. (https://finno-ugric-corpora.utu.fi/cqpweb/).

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