

## Encoding definiteness on pronominal objects in Mordvinic

This article examines the morphosyntax of pronouns in object function and reveals the syntactic and morphological differences between nominal and pronominal objects in Mordvinic. The variation in case marking and declension type of nominal objects is affected by definiteness. Indefinite objects are in the basic declension nominative, whereas definite ones are in the definite or possessive declension genitive. Furthermore, definite objects may be indexed on the verb. In this paper, I analyze the morphosyntax of pronouns, in order to reveal the regularities between semantics and morphological marking and to provide a better understanding of definiteness. For this purpose, the finite forms of perception verbs were collected from the MokshEr corpus, which contains written texts in the literary languages, and native speakers were consulted on the results. Perception verbs were chosen for this study because they agree with the object in person and number more frequently than other semantic classes of verbs, thus providing good material for examining the correlation of definiteness with verbal conjugation. The paper shows how definiteness is displayed within the morphosyntax of pronouns and uncovers how verbal conjugation correlates with different pronominal objects.

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## 1. Introduction

In Mordvinic, definiteness influences the case marking of objects, and verbs can agree with definite objects in person and number. Therefore, definiteness plays an important role in transitive sentences. The present paper sets out to discover the correlation between identifiability and morphosyntactic marking in the light of the pronominal class. As Mordvinic has grammatical devices to mark that the noun is known to the participants of the discussion and has differential object marking, which is based on definiteness, it can provide a better understanding on the correlation of identifiability and grammatical marking. Pronouns are an especially good source for this, as they include both primarily identifiable (e.g. first- and second-person pronouns) and unidentifiable members (e.g. indefinite and interrogative pronouns).

Differential object marking and indexation have been the focus of many previous studies on transitivity in Mordvinic (see e.g. Alhoniemi 1991; 1994; Grünthal 2008). Grünthal (2008: 224) notes that the morphosyntactic behavior of pronouns shows considerable differences compared to nouns, e.g. definite nouns are typically in the definite declension in object function (*kudo-ńt* [house-DEF.GEN] ‘the house’), whereas most pronouns are in the basic genitive (*še-ń* [that-GEN] ‘that’). The present paper offers a detailed description of the behavior of pronominal objects in Mordvinic to compensate for these gaps in the description of Mordvinic languages.

The material of the present study is restricted to the pronominal objects of perception verbs. Perception verbs agree with definite objects in person and number more frequently than other semantic classes of verbs (see e.g. Markov 1964: 71–74; Alhoniemi 1994: 147–148), thus I suppose that if the verb agrees with certain pronouns in person and number, the material contains such examples in most of the cases. Furthermore, perception verbs are used frequently, which makes analyzing pronominal objects in different contexts possible.

The structure of this article is as follows. In the next section I delve into the terminological issues regarding transitivity, definiteness and object marking. The section focuses on these issues from a cross-linguistic viewpoint and considers how the Mordvinic languages fit into the findings of typological studies. The source material and the methodology are introduced in Section 3. Section 4 discusses the different pronominal classes, their referential features and their morphosyntactic behavior in object function. Section 5 provides a conclusion for this paper.

## 2. Background

This section focuses on previous research on nominal declension, object marking, and verbal conjugation in Mordvinic. Before delving into the issue of object marking any further, some remarks are in order about transitivity. Transitivity can be considered from many different points of view. Typically, transitivity is understood semantically. In this view, prototypical transitive sentences include an acting agent and a passive patient, which undergoes an observable change of state. Nevertheless, for the purposes of this paper, the semantic definition is inadequate, as I focus on perception verbs, which do not encode semantically prototypical transitive events by any means. Perception verbs express an event with a perceiver agent and a non-influenced patient. Furthermore, the semantic understanding of transitivity is insufficient to separate different structures from each other. Therefore, the structural understanding of transitivity is also important for the present paper, as it allows for separating structures based on the morphological marking of the semantic roles. Combining the semantic and structural definition of transitivity is not something specific only to this paper, but it appears in typological works focusing on transitivity as well (see e.g. Kittilä 2002a).

Considering transitivity as an interaction of semantics and structure is a convenient starting point for examining perception verbs in Mordvinic. Even though perception verbs cannot be considered as transitive from the semantic viewpoint, they are attested in structures which are specific for highly transitive events. Such features include verbal agreement in person and number with definite objects (see Grünthal 2008).

Definiteness is often seen as a morphosyntactic category that grammaticalizes the pragmatic category of identifiability (see e.g. Lyons 1999). The Mordvinic languages have an affixal category that marks that the referent of the NP is identifiable for the speaker and the hearer: e.g. *E vel'e* 'village; a village' vs. *vel'e-s* [village-DEF] 'the village'. Nevertheless, definiteness markers are not always present on nouns that have identifiable referents, such as proper names and pronouns. Therefore, I consider those expressions as definite ones, which have an identifiable referent. Personal, demonstrative, reflexive, relative and universal quantifying pronouns are inherently definite, as they are either used anaphorically, with reference to totality or their reference can be identified in discourse. It is common for these pronouns to be marked in the genitive case in object function. The

only exception seems to be plural personal pronouns in Moksha, which are syncretic in the nominative and genitive cases. Nevertheless, case marking alone is insufficient to determine which pronouns are to be considered as definites, since indefinite pronouns with human reference are also marked in object function.

Distinguishing referential features and nominal inflection is important. Morphological marking is referred to throughout this paper by mentioning the name of the appropriate declension type (basic, definite and possessive) and the case ending of the noun. Thus, the labels definite declension or definite genitive case refer to the morphological marking of the noun, whereas the labels definite NP or definite referent express that the referent of the NP can be identified in the context. As I described above, the morphological markers of definiteness are not always attached to identifiable NPs, of which pronouns are a good example.

The Mordvinic languages distinguish three declension types: the basic, the definite and the possessive. The declension types are shown in (1a–c). The basic declension is unmarked with respect to identifiability, as shown in (1a).

The definite declension, illustrated in (1b), marks that the referent is identifiable for the speaker and the hearer. Identifiability with the referent can be established based on the immediate situation, previous or common knowledge, uniqueness, and anaphoric reference (Tixonova 1972). Being a member of a known group is also considered as being identifiable in Mordvinic, even though the hearer may not know which member is referred to (see Kaškin 2018: 136–138 for Moksha).

The possessive declension, illustrated in (1c), marks the person and number of the possessor and the number of the possessed. There are considerable differences between the possessive declension paradigms of Erzya (E) and Moksha (M). Grammatical cases are often formally identical in Erzya. The genitive and the nominative cases can be distinguished from each other only if both possessor and possessed are in the singular, as in (1c) (see also Trosterud 2006: 301). In the Moksha possessive declension paradigm, no case syncretism occurs, nevertheless, the number of possessed is differentiated only with singular possessors.

(1) a. basic declension:

|   |                |   |               |
|---|----------------|---|---------------|
| E | <i>veľe-ń</i>  | M | <i>veľǎ-ń</i> |
|   | village-GEN    |   | village-GEN   |
|   | ‘of a village’ |   |               |

b. definite declension:

|   |                  |   |                 |
|---|------------------|---|-----------------|
| E | <i>vele-ńt</i>   | M | <i>velə-t</i>   |
|   | village-DEF.GEN  |   | village-DEF.GEN |
|   | ‘of the village’ |   |                 |

c. possessive declension:

|   |                      |   |                      |
|---|----------------------|---|----------------------|
| E | <i>vele-n-ze</i>     | M | <i>velə-n-c</i>      |
|   | village-GEN-POSS.3SG |   | village-GEN-POSS.3SG |
|   | ‘of her village’     |   |                      |

Mordvinic also knows differential object marking, which is based on definiteness. Indefinite objects are expressed in the basic nominative,<sup>1</sup> as in (2a). Definite objects, on the other hand, are in the definite genitive case, as in (2b). The genitive and the accusative cases are identical in these languages. I refer to this case ending with the label “genitive case” following the tradition of previous literature. Objects in the possessive declension are also in the genitive, as in (2c) (Tixonova 1966: 241–243; Grünthal 2008: 222).

(2)<sup>2</sup>a. *rama-ń*      *lišme*  
 buy-PST.1SG    horse.NOM  
 ‘I bought a horse.’

b. *rama-j-ńä*      *lišmə-t*  
 buy-PST-1SG>3SG    horse-DEF.GEN  
 ‘I bought the horse.’

c. *rama-j-ńä*      *lišmə-n-c*  
 buy-PST-1SG>3SG    horse-GEN-POSS.3SG  
 ‘I bought his/her horse.’ (M: Ekaterina Kirdjaškina, p.c.)

The definite and possessive declension types are not always overtly expressed on the object component, therefore the variation in case marking is the only obligatory feature of the object (Grünthal 2008: 224). Especially

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1. The nominative case is unmarked in both Mordvinic languages. In the glossed examples, I show that the word is in the nominative only when it is relevant.
  2. I cite examples from only one language (either Erzya or Moksha) to illustrate a phenomenon that is common to both languages. The abbreviation of the language from which the example is drawn is stated after the translation. In cases where there are considerable differences between the languages, I discuss them separately and cite examples from both.

proper names and pronouns are in the basic declension genitive as objects, as in (3). Furthermore, common nouns can be in the basic declension genitive on rare occasions, e.g. animal names in Erzya folktales. (Markov 1964: 79–81; Tixonova 1966: 242–243; Salamon 1989: 92.)

- (3) *ńä-i-ńä*                      *Maša-ń*  
 see-PST-1SG>3SG    M.-GEN  
 ‘I saw Maša.’ (M: Ekaterina Kirdjaškina, p.c.)

Examples (2) and (3) show that verbal inflection also varies in transitive clauses, and verbs can be either in the subjective or in the objective conjugation. In the subjective conjugation, verbs agree only with the subject, whereas in the objective conjugation they agree with both the subject and the object in person and number. Verbs can be in the objective conjugation only with objects that are in the genitive case. (See Bartens 1999: 175–176.)

The two verbal conjugation types encode aspectual oppositions. The objective conjugation usually encodes perfective aspect. The subjective conjugation encodes imperfective aspect with identifiable objects.<sup>3</sup> (See Koljadenkov 1954: 193.) Nevertheless, cognitive and perception verbs, e.g. E *M sodams* ‘know’, E *čarkodems*, M *šarkədəms* ‘understand’, E *ńejems*, M *ńäjəms* ‘see’, etc. can be in the objective conjugation even when they refer to unbounded events (Koljadenkov 1963: 438–439; Alhoniemi 1994: 147–148). Therefore, perception verbs differ from other semantic groups of verbs, as they are in the objective conjugation more frequently with identifiable objects.

Perception verbs describe an event with two participants: the experiencer and the stimulus. These verbs display different degrees of transitivity. Agentive perception verbs, such as the English *look* and *listen*, encode a consciously acting agent as subject. Non-agentive perception verbs, such as the English *see* and *hear*, have an experiencer agent as subject. Agentive perception verbs usually describe a situation where the stimulus is not completely perceived, whereas the object of non-agentive perception verbs describe a more complete perception of the stimulus. The different degree of transitivity of these verbs is often reflected in the structure in which they are captured. (Tsunoda 1985: 389.)

This is the case in Mordvinic as well. Agentive verbs, such as E *vanoms*, M *vanəms* ‘look’, are not always encoded in transitive constructions.

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3. With objects in the nominative, aspectual oppositions are not encoded with verbal conjugation, as the subjective conjugation is the only option in this case.

Furthermore, they also have different aspectual features, which influences the choice of their conjugation type. Therefore, I focus only on non-agentive perception verbs in this paper. These verbs are E *ńejems*, M *ńäjəms* ‘see’, E M *mařams* ‘hear; feel’ and M *kuləms* ‘hear’. The verb *mařams* expresses all kinds of physical and psychological feelings, except for seeing. The Erzya literary language lacks the cognate of the Moksha *kuləms* that only expresses hearing. These verbs are most frequently in the objective conjugation with definite objects. The use of the subjective conjugation is more frequent in Erzya than in Moksha. According to Bernhardt (forthcoming), the variation of conjugation types correlates with aspect. The subjective conjugation is used, when actual perception does not take place, or it describes repeating events or focuses on parts of a situation that are simultaneous with other actions. In Moksha, the subjective conjugation seems to have similar semantics with definite objects. It is used if the focus is on the repetition or the continuation of perception. The present paper discusses the variation of conjugation type only in those cases where it follows a different pattern compared to verbs with nominal objects.

### 3. Data and methodology

The data is collected from the MokshEr corpus provided by the Research Unit of Volgaic languages at the University of Turku. My findings from the corpus are complemented by native speakers, who provided examples and explained the interpretation of the different grammatical structures.

The MokshEr corpus includes literary texts in Erzya and Moksha from between 2002 and 2008 including both original texts and translations. The Erzya corpus consists of 2,784,587 tokens, while the Moksha one consists of 1,742,497 ones. The corpus does not contain morphological annotations.

I searched the corpus for all the finite forms in the indicative present and first past tense of the non-agentive perception verbs presented in Section 2, namely: E *ńejems*, M *ńäjəms* ‘see’, E M *mařams* ‘hear; feel’ and M *kuləms* ‘hear’. Only verbs with pronominal objects were included in the data. The pronouns that are considered here are personal pronouns (6), demonstrative pronouns (3), reflexive pronouns (1), reciprocal pronouns (1), interrogative pronouns (3), relative pronouns (3), indefinite pronouns (3) and universal quantifying pronouns (1). As the pronominal group is not homogenous, each pronominal category requires different research questions and the subsections in Section 4 consider their different aspects. I suppose that personal,

demonstrative, reflexive, relative and universal quantifying pronouns are in the genitive in object function, as their referents are identifiable in the context. Furthermore, it can be hypothesized that pronouns whose referents are not identifiable, are left without case marking in object function.

The data is presented in Table 1.<sup>4</sup> As the Erzya corpus is larger than the Moksha one, only the percentages can be compared between the two languages and not the occurrences. Apart from the occurrences in the table, it was necessary to search the corpus for some pronouns to establish a better view of its use. These separate searches are not included in the tables and are considered as additions.

Table 1: Perception verbs with pronominal objects in Erzya and Moksha

| Verb                           | Conjugation | Erzya     | Moksha    |
|--------------------------------|-------------|-----------|-----------|
| <i>ńejems, ńäjəms</i><br>'see' | subjective  | 165 (37%) | 123 (28%) |
|                                | objective   | 283 (63%) | 312 (72%) |
| <i>mańams</i><br>'hear; feel'  | subjective  | 186 (53%) | 26 (10%)  |
|                                | objective   | 167 (47%) | 235 (90%) |
| <i>kuləms</i><br>'hear'        | subjective  | –         | 43 (34%)  |
|                                | objective   | –         | 84 (66%)  |

As Table 1 shows, these verbs occur in both conjugation types with pronominal objects. There are two reasons for the variation in conjugation types. First, the material includes indefinite, interrogative and reciprocal pronouns, with which the verb cannot be in the objective conjugation. Second, the variation of conjugation types also expresses aspectual oppositions. This seems to be more frequent in Erzya than in Moksha in the light of the present data: in Erzya, as many as 203 verbs are in the subjective conjugation with pronominal objects that can have a verb in the objective conjugation, whereas in Moksha only 8 verbs are.

Native speakers also helped me with the analysis of the material. I consulted Nina Agafonova and Aleksandr Danilčev with questions related to the Erzya material and Ekaterina Kirdjaškina and Oksana Belkina in relation to the Moksha material. All the informants are either staff or students at the

4. In Table 1 and in the tables in other sections as well, only material collected from the MokshEr corpus is presented. Examples provided by the informants and separate searches of the corpus are excluded from these tables, as they fail to provide information on the frequency of different categories.

Ogarëv Mordovia State University and have at least basic training in linguistics. The speakers provided examples of such constructions that occur rarely in the data. Furthermore, I also constructed minimal pairs, where I changed the declension type of nouns or the conjugation type of verbs and asked the informants about the grammaticality of the structure and its semantics.

#### **4. The pronominal objects of perception verbs**

This section discusses different kinds of pronouns and their correlation with verbal conjugation in the data. I reflect on the semantic (in)definiteness of these pronouns, their morphosyntax and the conjugation of verbs with them.

As the pronominal class is not homogeneous, slightly different questions arise in the analysis of different pronominal classes. The overall goal of this paper is to study the correlation of form and semantics. Section 4.1 focuses on the ways of expressing person with different conjugation types and the function of personal pronouns with verbs in the objective conjugation. This is followed by Section 4.2 which examines how definiteness is established in context and how it is reflected in the morphosyntactic marking of demonstratives. Reflexive and reciprocal pronouns are discussed in Sections 4.3 and 4.4, respectively. Reflexive and reciprocal constructions diverge from basic transitive sentences, thus these pronouns can provide answers to how transitivity influences morphosyntactic marking. Interrogative, relative and indefinite pronouns are examined in Sections 4.5, 4.6 and 4.7. These pronouns have the same roots, but they are nevertheless used in different functions. These sections discuss those cases where semantic (in)definiteness and grammatical marking do not cover each other. Universal quantifiers are discussed in Section 4.8. These pronouns are inherently definite, and their definiteness is based on the reference of totality.

##### **4.1. Personal pronouns and other person indexes**

Mordvinic has various means to encode object person: personal pronouns, emphatic personal pronouns, possessive suffixes on postpositions and with the objective conjugation. This section focuses on the use of personal pronouns in object function in the analyzed data. The ways of expressing object person depend, first of all, on the conjugation type of the verb. With verbs in the subjective conjugation, person must be expressed separately from the verb. In Section 4.1.1, I discuss the strategies for expressing object person with

verbs in the subjective conjugation. With verbs in the objective conjugation, personal pronouns are often used in an emphatic or contrastive meaning. In Section 4.1.2, I discuss how emphasis or contrast emerges in discourse and the differences between encoding discourse participants and third person.

Mordvinic has first-, second- and third-person pronouns in the singular and plural (Agafonova 2000: 125–126; Poljakov 2000: 103–104). Personal pronouns in object function behave like definite NPs: they are in the genitive case and the verb can stand in the objective conjugation with them.

Verbal conjugation may vary with reference to person as is shown in Tables 2 and 3. The subjective conjugation focuses on the continuation or the repetition of the event or it can be used in settings, where actual perception does not take place.

Table 2: Object person indexation in Erzya

| Person \ Conjugation | Subjective | Objective      |                |
|----------------------|------------|----------------|----------------|
|                      |            | Double marking | Single marking |
| 1st                  | 12         | 8 (11%)        | 62             |
| 2nd                  | 1          | 6 (13%)        | 41             |
| 3rd                  | 31         | 54 (30%)       | 135            |

Table 3: Object person indexation in Moksha

| Person \ Conjugation | Subjective | Objective      |                |
|----------------------|------------|----------------|----------------|
|                      |            | Double marking | Single marking |
| 1st                  | –          | 4 (6%)         | 61             |
| 2nd                  | 1          | 4 (9%)         | 40             |
| 3rd                  | 1          | 38 (19%)       | 159            |

I refer to encoding person as argument indexing, as proposed by Haspelmath (2013). This term includes personal pronouns that behave like nouns and bound forms that are expressed on verbs or postpositions.

#### 4.1.1. Indexing object person with verbs in the subjective conjugation

Verbs in the subjective conjugation include information only about the subject person, but not about the object person. Therefore, object person must be expressed separately from the verb. In these cases, object person

can be expressed either with a personal pronoun in the genitive as in (4) or with the inessive ending postposition *E ej-se*, *M e-sa*<sup>5</sup>, as in (5).

- (4) -- *ańćək škamə-nza soń i ńäjə-n.*  
 only alone-POSS.3SG 3SG.GEN and see-PRS.1SG  
 ‘-- and I see only her.’ (M: Moksha-2007\_6\_73-81: 126)
- (5) -- *kuł-i e-sə-t il’i af.*  
 hear-PRS.3SG PP-INE-POSS.2SG or NEG  
 ‘-- whether she can hear you or not.’ (M: Lobanov: 991)

With the postposition, object person is usually indexed in the form of possessive suffixes, therefore using the personal pronoun is not necessary. In Erzya, the personal pronoun can be used as the dependent of the postposition in the genitive, and in this case the postposition appears without possessive suffixes: e.g. *toń ej-se* [2SG.GEN PP-INE] ‘in you’. In Moksha, possessive suffixes are obligatory on the postposition even when the personal pronoun is present: *toń e-sə-t* [2SG.GEN PP-INE-POSS.2SG] ‘in you’. (See Keresztes 1990: 62–63.) Erzya thus avoids double marking person with verbs in the subjective conjugation and chooses to express it either with the

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5. The postposition, *E ej-lez-*, *M e-lez-* is semantically empty in modern Mordvinic and its only function is to carry the case suffix required by syntax. This postposition declines in case and the postpositional construction can be considered as part of the definite declension paradigm of these languages. (See Alhoniemi 1992: 33–34; Hamari 2016: 4–7). In Moksha, using the postpositional construction is the only option to express the definite declension in cases other than the nominative, genitive and dative. Erzya knows both synthetic constructions, where the definiteness marker follows the case suffix, and the postpositional constructions in the definite declension of the non-grammatical cases. Nevertheless, these constructions have different semantics. (See Alhoniemi (1992) for more details on the relationship of postpositional constructions and synthetic cases.) The postpositional construction with an inessive ending can occur in object function. The verb always stands in the subjective conjugation with it, and this construction expresses an imperfective aspect. (See Alhoniemi 1991: 29; Alhoniemi 1992: 35; Bartens 1999: 96.) Nouns precede this postposition and are in the genitive before it. Personal pronouns are not necessarily expressed separately from the postposition, and reference to person can be attached to it in the form of possessive suffixes. (See Agafova 2000: 128; Lipatov & Davydov 1980: 256.) As the postposition acquires its meaning only through the local suffixes that follow it and it cannot be directly translated, I gloss it with the abbreviation *pp*.

personal pronoun in the genitive or with possessive suffixes attached to the postposition. In Moksha, the postposition always gets possessive suffixes.

#### 4.1.2. Indexing object person with verbs in the objective conjugation

Verbs in the objective conjugation index object person and number. Therefore, using personal pronouns is optional in this case. In this section, I examine the use of personal pronouns with verbs in the objective conjugation.

Table 4 shows that both languages prefer single marking over double marking. Previous research on Mordvinic revealed that first- and second-person personal pronouns are used in different contexts than third-person ones. Double marking first and second person often feels emphatic or contrastive (Salamon 1989: 97; Kangastus 2012: 101). Third-person personal pronouns are used in contexts where the antecedent is located far behind in the preceding context (Kangastus 2012: 98–99). These remarks are studied here in more detail and illustrated with examples from the data.

Table 4: Object person indexation with verbs in the objective conjugation

| Person | Erzya          |                | Moksha         |                |
|--------|----------------|----------------|----------------|----------------|
|        | Double marking | Single marking | Double marking | Single marking |
| 1st    | 8 (11%)        | 62             | 4 (6%)         | 61             |
| 2nd    | 6 (13%)        | 41             | 4 (9%)         | 40             |
| 3rd    | 54 (30%)       | 135            | 38 (19%)       | 159            |

As the table shows, double marking discourse participants is relatively rare, it occurs in about 10% of the cases. In the data, the reasons for double marking object person depend on the structure of the text: in narratives, the changes of information structure seem to account for using personal pronouns, whereas in dialogues, contrast is the primary reason for it.

In narratives, double marking first person is used in contexts where reference to person occurs several sentences prior to the personal pronoun. Previous reference may be either single or double marked, depending on the context. Often several different persons are introduced between the two references. In these contexts, object person often feels emphatic or highlighted. In Krifka’s terms, highlighting frequently correlates with focus, which “indicates the presence of alternatives that are relevant for the

interpretation of the linguistic expressions” (Krifka 2008: 247). The reason for double marking first person in (6) seems to be the presence of other alternative referents in the context. In this example, other characters are introduced before the narration shifts back to first person.

A further precondition for double marking in (6) seems to be that first person is not present in the immediate context preceding the referent. Chafe (1987) correlates the activation state of referents in discourse with their form. According to him, referents that are present in the immediate situation, i.e. “active referents”, are expressed with more attenuated forms than those that are not. An active referent can change into a semi-active state if it is not focused on for some time. In (6), the narrative shifts back to first-person viewpoint, therefore first person is reactivated in these contexts.

- (6) *Ańśak, ul'ema, kort-ića-t'-ńe-ń val-ost*  
 only apparently speak-PTCP.PRS-PL-DEF-GEN word-POSS.3PL  
*prado-v-ś-t', di Vašil' Ivanič moń ńe-i-mim.*  
 end-PASS-PST-3PL and V. I. 1SG.GEN see-PST-3SG>1SG  
 ‘But it seems that the speakers ended their discussion and V. I. saw me.’ (E: Syatko-2004\_3\_3-17: 591–592)

In the data, most first-person personal pronouns occur in contexts similar to (6). Based on the data it seems that the correlation of both focus and the activation state of the referent are behind the choice of double vs. single marking. This issue, nevertheless, should be examined in more detail. It seems that when only one condition is met, double marking does not necessarily occur. This is shown in (7), where first person is mentioned for the first time, but object person is indexed only on the verb. One possible explanation for not using the personal pronoun may be that there are no alternative participants that could be relevant for interpreting the referent, since there are exactly two participants introduced in the context. I omitted two sentences from the example that describe Mrs. Agaj.

- (7) *Agaj baba s-i lavka jon-do. [- -]*  
 A. old.woman come-PRS.3SG shop direction-ABL  
*Ñe-i-mim – aχolda-ś: – –*  
 see-PST-3SG>1SG wave-PST.3SG  
 ‘Mrs. Agaj comes from the direction of the shop. She saw me and waved: – –’ (E: Syatko-2007\_3\_24-57: 483–485)

There are different reasons for double marking discourse participants in dialogues or letters that are addressed to another person. In these contexts, the personal pronoun often indicates contrast. In (8), person is topical, but it is contrasted with another topical referent. Contrastive topics also include focus, which indicates that there are alternatives for the interpretation of the reference (for contrastive topics see Krifka 2008: 267–268).

- (8) *Ton moń ašəmaʃń ĩăjə, a mon – toń.*  
 2SG 1SG.GEN NEG.PST.2SG>1SG see.CNG and 1SG 2SG.GEN  
 ‘You did not see me, and I did not see you.’  
 (M: Moksha-2007\_6\_48-66: 403)

Third-person indexes are used anaphorically in the source material. Third-person reference is not restricted to human or animate reference (Lipatov & Davydov 1980: 253). Table 4 shows that third person is more frequently double marked than discourse participants. In Erzya, double marking is used in 30% of the cases, whereas in Moksha it is 19%. The contexts of double marking third person seem to be similar in the two languages.

Single marking most often has active and salient antecedents (see Kangastus 2012: 73–74 for a discussion on Erzya). The grammatical function of the antecedent does not play a role in the choice of third-person indexation. The antecedents of bound person indexes can have any syntactic function, subject, object, or other sentence constituents. In (9), the antecedent of the third-person reference serves as dependent in a postpositional construction. The topic continues with the same referent.

- (9) *Jorda-f sumka-n-zə-n vaks-ka jota-ś –*  
 throw-PTCP.PST bag-PL-POSS.3SG-GEN beside-PROL go-PST.3SG  
*af=i ĩăjə-žəń.*  
 NEG=even see-PST.3SG>3PL  
 ‘He went by his thrown bags and did not even see them.’  
 (M: Moksha-2007\_6\_48-66: 306)

The data of this study shows that distance from the antecedent does not play an important role in using third-person personal pronouns. Both single and double marking are common in contexts where the antecedent of the referent occurs in the previous clause or sentence, and the antecedent is active and salient. This is shown in (10). In this sentence, the antecedent of the personal pronoun is topical, as new information is linked to it.

- (10) *Ańuta ańśǎ-ś: vaga veńǎpt'-si*  
 A. think-PST.3SG here stretch-PRS.3SG>3SG  
*kuću-ńǎ-ks laďa-f*  
 spoon-DIM-TRSL bring.together-PTCP.PST  
*kurmǎś-ka-n-c – i sońń ńǎj-saź.*  
 hand-DIM-GEN-POSS.3SG and 3SG.GEN see-PRS.3PL>3  
 ‘Ańuta thought that she would stretch her hands bought together as  
 a spoon and she would be seen.’ (M: Moksha-2007\_5\_45-64: 64–65)

A probable reason for double marking third person might be the presence of other referents in the setting, such as the object in (10), Ańuta’s hands. This referent is not topical, and therefore it does not pose as an alternative for interpreting the sentence. Nevertheless, double marking can facilitate reference tracking in contexts where there are other referents present.

Using first- and second-person personal pronouns with verbs in the objective conjugation is infrequent in the source material. These pronouns often feel emphatic or contrastive, as they are used when there are other salient referents present in the discourse. Double marking third person seems at first sight similar to double marking discourse participants: in both cases the presence of other possible referents influences the choice of encoding person. There is nonetheless a relevant difference between them. Discourse participants are double marked in contexts where the other referents are at the center of attention in the immediate situation. Double marking third person, on the other hand, occurs in contexts where the antecedent is active and salient. The other referents that are present in these contexts do not pose as alternatives for interpreting the linguistic expressions, as they are not topical.

#### 4.2. Demonstrative pronouns

The Mordvinic languages have three sets of demonstratives: proximal E *íe* M *íǎ*, distal E *śe*, M *śǎ* and contrastive E M *tona* (Lipatov & Davydov 1980: 259–261). Demonstrative pronouns in the literary languages essentially refer to an antecedent or a proposition in the surrounding context. Therefore, they can be considered as definite expressions. This is reflected by their morphosyntactic behavior as well: demonstrative pronouns are in the genitive case in object function and the verb can stand in the objective conjugation with them. These pronouns are in the basic declension in

the singular and in the definite declension in the plural. This variation is shown in (11) and (12).

- (11) *Ćora-ńä-ś* *ńäjə-žä* *ańćək* *śü-ń,* *koda*  
 boy-DIM-DEF see-PST.3SG>3SG only that-GEN how  
*veľks-əz-əz-na* *koma-ś* *pančfu* *ručä-ńa-sa*  
 above-ILL-POSS.3SG stoop-PST.3SG flowery scarf-DIM-INE  
*štír-ńä.*  
 girl-DIM  
 ‘The boy saw only how a girl in a flowery scarf stooped over him.’  
 (M: JT-2005\_6\_19: 18)
- (12) *Kavto-ška-śad-t* *eskelks-eń* *juta-ž* *siń* *ńe-i-ž*  
 two-CPR-hundred-PL step-GEN go-GER 3PL see-PST-3PL>3  
*še-t-ńe-ń,* *ki-t* *šež-i-ž* *kal-oń*  
 that-PL-DEF-GEN who-PL disturb-PST-3PL>3 fish-GEN  
*kuńd’-še-ma-st.*  
 catch-FREQ-NMLZ-POSS.3PL  
 ‘After going about 200 steps, they saw those who had disturbed  
 them fishing.’ (E: Syatko-2006\_9\_10-17: 90–91)

The variation of declension type results from the declension paradigms of the Mordvinic languages. In the plural declension paradigm, only the nominative case can be expressed in the basic declension, while other cases can only be expressed in the definite declension (Agafonova 2000: 133; Poljakov 2000: 108).

### 4.3. Reflexive pronouns

In Mordvinic, reflexive constructions are formed with the reflexive pronoun *E pńa*, *M pńä*, which is based on the common noun ‘head’ (Lipatov & Davydov 1980: 266; Agafonova 2000: 142; Toldova & Šalganova 2018: 638–641). Reflexive pronouns are anaphoric, and their antecedents appear within the same clause. Therefore, reflexive pronouns can be considered as definite expressions.

The Mordvinic reflexive pronouns usually agree with the subject in person and number and the verb can stand in the objective conjugation with them (Markov 1964: 82–83). Verbs agree with third-person singular objects in reflexive constructions.

Nevertheless, the marking of the pronoun varies, and in Erzya, the verb most frequently stands in the subjective conjugation with the reflexive pronoun. This section examines the morphosyntax of the reflexive pronoun in detail, with the aim of determining what lies behind the variation of verbal conjugation in Erzya and the variation of case marking in Moksha. Since the Erzya and Moksha reflexive constructions differ from each other, I discuss Erzya in Section 4.3.1 and Moksha in 4.3.2. These sections also reveal the differences between the two languages in the choice of verbal conjugation type: in Moksha, verbal conjugation correlates more tightly with object marking, whereas in Erzya, the two conjugation types capture aspectual oppositions and the choice of the conjugation type correlates with the situation described by the verb.

### 4.3.1. Erzya

In Erzya, the conjugation type of the verb varies in reflexive constructions and the choice of conjugation type depends on the construction. The two perception verbs behave in a different way. The verb *ńejems* ‘see’ in reflexive constructions expresses that perceivers see themselves, whereas *mařams* ‘hear; feel’ is used in a grammaticalized expression describing the state or frame of mind of the subject.

The verb *ńejems* is generally used in the objective conjugation with the reflexive pronoun, as in (13). In this sentence the subject perceives an image of herself in the mirror. The conjugation type of *ńejems* with the reflexive pronoun adheres to the same rules as with other definite objects. Rarely is *ńejems* found in the subjective conjugation, and in these cases, it captures an imperfective situation. In (14), the conjugation type of the verb expresses a habitual event.

- (13) *Ńina ńe-i-že eš pńa-n-zo di*  
 Ń. see-PST-3SG>3SG OWN REFL-GEN-POSS.3SG and  
*šerģed'e-v-š: – –*  
 exclaim-PASS-PST.3SG  
 ‘Nina saw herself and cried out: – –’ (E: Syatko-2006\_11\_40-42: 89)
- (14) *On-sto-n=gak eš pńa-m ńej-an, – –*  
 dream-ELA-POSS.1SG=even OWN REFL-POSS.1SG see-PRS.1SG  
 ‘I see myself in my dreams as well, – –’ (E: Syatko-2004\_6\_3-32: 402-403)

On the contrary, *mařams* is most often in the subjective conjugation with the reflexive pronoun. The expression *mařams přa* denotes a state or a frame of mind, where the self is not perceived in the strict sense. This structure is different from other structures of perception verbs which describe an event where the experiencer perceives some stimulus. The variation of the conjugation type in the *mařams přa* construction is shown in (15).

- (15) *Ivan Petrovič-eň lězks-en-ze vel'dě*  
 I. P.-GEN help-GEN-POSS.3SG with  
***mař-i-ja přa-m séde vadřasto, meže-š***  
 feel-PST-1SG>3SG REFL-POSS.1SG CPR well what-DEF  
*lězda-š štá-ms pilge lang-s. – –*  
 help-PST.3SG stand-INF foot on-ILL  
*Boľníca-sto-ńt líš-i-ń di mař-an*  
 hospital-ELA-DEF exit-PST-1SG and feel-PRS.1SG  
***přa-m a beřańste.***  
 REFL-POSS.1SG NEG bad

‘With the help of Ivan Petrovič, I felt better, which helped me to stand on my feet. – – I came out of the hospital and I do not feel bad.’  
 (E: EP-2007\_30-avgust\_2c: 18–21)

In (15), the verb is first in the objective conjugation, and then in the subjective conjugation. The objective conjugation implies that at the time the writer was in the hospital, he started to feel better. The subjective conjugation, on the contrary, expresses his overall feeling or state. In other words, the objective conjugation describes a state in a certain situation which holds only temporarily, while the subjective conjugation is used for describing ongoing, general states.

The variation of conjugation types captures aspectual oppositions in Mordvinic (see Section 2). The objective conjugation usually expresses a completed or perfective event (Koljadenkov 1954: 132). Perception verbs (along with other semantic categories, such as cognitive and emotional verbs) are most frequently in the objective conjugation with definite objects, even when they refer to a continuing state (Koljadenkov 1963: 438; Alhoniemi 1994: 147–148).

It seems that in Erzya, perception verbs that capture actual perception and the grammaticalized *mařams přa* construction belong to different situation types, and this is reflected in the choice of conjugation type as well. The *mařams přa* construction represents a stative state of affairs, where

the state continues unchanged as long as the situation holds (for stative situation types from a typological viewpoint, see Smith 1997: 32–35). In the *mařams pr̄a* construction the temporariness of the state can be emphasized with the objective conjugation. Perception verbs in other constructions, on the other hand, can capture both states and achievements (Smith 1997: 56–57). In these cases, the objective conjugation captures that perception takes place and the subjective conjugation can be used to convey different semantics, e.g. the meaning of habituality. Probably a key difference between the two structures is that while perception verbs in their primary meaning describe the perception of a stimulus, which happens momentarily and may continue after the initial moment unchanged for a period of time, the *mařams pr̄a* construction does not imply that a stimulus is perceived but rather expresses the state or feeling of the subject.

The reflexive pronoun can be considered as definite in Erzya and seems to adhere to the same rules as other definite objects: the pronoun is in the genitive in object function and the verb can stand in the objective conjugation with it.

#### 4.3.2. Moksha

In Moksha, *pr̄ä* can be used either in the possessive declension or in its base form. The declension type of the reflexive pronoun correlates with the choice of verbal conjugation type: the verb is always in the objective conjugation if *pr̄ä* is in the possessive declension, whereas if it is in its base form, the verb can only be in the subjective conjugation (Toldova & Šalganova 2018: 644). In the source material, *pr̄ä* occurs only five times with *mařams* in the subjective conjugation. In all these cases the object is in its base form, as in (16).

- (16) *Son anəkəŋga vešala-l', a t̄äni mařa-š*  
 3SG already cheerful-PST2,3SG and now feel-PST,3SG  
*pr̄ä šadə=ŋga lac.*  
 REFL CPR=even well  
 ‘He was already cheerful, and now he felt even better.’  
 (M: Moksha-2005\_1-2\_190-217: 548–549)

Toldova & Šalganova (2018: 646–647) argue that some speakers use *pr̄ä* in its base form in focus position. In *EMJa* (2018), focus is most probably understood in Lambrecht’s (1994) terms: it contains new information about

the topic.<sup>6</sup> Toldova & Šalganova (ibid.) do not discuss the frequency of the undeclined reflexive pronoun or how systematically it correlates with information structure. In the examples given by Toldova & Šalganova (ibid.), the information status of the pronoun or the expression is not clear, as they do not provide its larger context.

In the data of this study, the undeclined reflexive pronoun seems to be used in constructions where it provides known information. It occurs in contexts where the state or the feelings of the person are discussed in the immediate vicinity of the reflexive structure, as in (16). Here, the state of the person is described first, i.e. he was already cheerful. In the second clause it is mentioned that he felt even better. In these terms, *śadānga lac* is new information, whereas the fact that he felt some particular way is already known.

Comparing (16) with (17) reveals that *mařams přa* usually conveys new information about the subject. In (17), the object is in the possessive declension and the verb is in the objective conjugation. In the context of this sentence, Antoša's meeting a girl on the train is described. Antoša's state is described only in the very beginning of the story and mentioned again in (17), several paragraphs later.

- (17) *Antoša-t lang-sta valg-ś ućama-n śembä*  
 A.-DEF.GEN ON-ELA descend-PST.3SG waiting-GEN all  
*stalmä-ś, son řäni mařa-žä*  
 burden-DEF 3SG now feel-PST.3SG>3SG  
*přa-n-c řada ćebärsta.*  
 REFL-GEN-POSS.3SG CPR well  
 'All the burden of waiting fell from Antoša, he felt better now.'  
 (M: Moksha-2007\_8\_68-73: 73-74)

My informants agreed that using the undeclined reflexive pronoun is better in the context of (16) than in (17). It seems that using the undeclined reflexive pronoun is more accepted in contexts where the reflexive construction

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6. Toldova & Šalganova (2018) do not explain what they mean by "focus position" (Russian *фокусная позиция*). Lambrecht's work is referred to in other chapters of the book where information structure is discussed. The terminology of information structure is versatile, with authors using the same terms for describing different phenomena. This is illustrated in this paper as well: I argue in Section 4.1.2 that focus implies the presence of other alternatives in the discourse.

contains known information. Nevertheless, the probable influence of information structure on the morphosyntax of the reflexive pronoun should be studied further. Comprehensive conclusions cannot be drawn on this matter based on the material of this study, since the reflexive pronoun occurred in only a couple of examples in its bare form. Additionally, the undeclined form might not be equally frequent with all the verbs that can take reflexive pronouns.

It must be noted that when the pronoun is the topic of the sentence, i.e. when new information is provided or asked about it, it must be in the possessive declension, as in (18). In this structure the bare form of the pronoun cannot be accepted at all.

- (18) *Přä-čə-ń*                      *koda*    *mařa-sak?*  
 REFL-POSS.2SG-GEN    how    feel-PRS.2SG>3SG  
 ‘How do you feel?’ (M: Moksha-2005\_12\_99-107: 314)

The reflexive pronoun is rarely undeclined in Moksha, at least in the literary texts. Nevertheless, this construction is accepted in the literary language. The use of the undeclined form seems to depend on context. When the reflexive construction conveys known information, the pronoun can be undeclined (see 16); otherwise using it in the possessive declension is preferred (see 17). In topic function, the undeclined pronoun is not accepted at all.

#### 4.4. Reciprocal pronouns

In reciprocal constructions, at least two participants that affect each other are conjoined. Mordvinic uses the reduplicated numeral ‘one’ as a reciprocal pronoun. This pronoun is also anaphoric, as it is coreferential with the subject. The pronoun is in the genitive in object function, but the verb cannot stand in the objective conjugation with it (Nina Agafonova, Oksana Belkina p.c., see also Xolodilova (2018: 106) for Moksha). According to previous typological research, reciprocal pronouns are to be considered as indefinites, due to their forms in various languages. In this section, I investigate this claim in more detail from the perspectives of the Mordvinic languages and differential object marking. The aim of this section is to discuss how the Mordvinic reciprocal construction fits into the findings of cross-linguistic research and to find the correlation between the reference of reciprocal pronoun and its morphosyntactic marking. The present

section complements the understanding of how definiteness and low transitivity correlates with morphosyntactic marking in Mordvinic.

The source material contains only a couple of examples of the reciprocal pronoun in Moksha. Therefore, the present section is primarily based on information provided by the informants. In Erzya, coreference with the subject may be marked with possessive suffixes: e.g. *vejke-st-vejke-st* [one-POSS.3PL-one-POSS.3PL] ‘each other’, but it is not obligatory, e.g. *vejke-vejke-ń* [one-one-GEN] ‘each other’ (Agafonova 2000: 131). In the latter case, the object is in the genitive of the basic declension. The Moksha reciprocal construction is not marked for person, as illustrated in (19).

- (19) *U'ama, odu fkä-fkä-ń af nãj-tama.*  
 maybe again one-one-GEN NEG see-PRS.1PL  
 ‘Maybe we will never see each other again.’ (M: JT-2005\_7\_14-18: 98)

According to Bhat (2004: 85–87), the reciprocal pronoun is anaphoric, but not definite. This anomaly results from the nature of reciprocal constructions, which combine two events. The involvement of the participants is the opposite in these events: e.g. (19) contains the event of me not seeing you again, where the first person is the perceiver and the second person is the perceived, and also the event of you not seeing me again, where the second person is the perceiver and the first person is the perceived. Bhat (*ibid.*) argues that coreference with the subject is only illusory and it is shown by the structure of the pronoun in various languages. Reciprocal pronouns tend to be based on indefinite expressions (such as the numeral one, which is the basis of the Mordvinic reciprocal pronoun as well). This probably explains also why languages mark coreference with the subject more often on the reflexive pronoun than on the reciprocal ones (see Dixon 2012: 154).

At first sight, Mordvinic seems to contradict the assumptions on the indefiniteness of the reciprocal pronoun, as the pronoun is in the genitive in object function. However, it will be shown later in this paper (Section 4.7) that indefinite pronouns with human referents are also in the genitive in object function, even though their referents cannot be identified. A more relevant argument for considering this pronoun as definite in Mordvinic seems to be that according to Bhat (*ibid.*), the pronoun refers to an indefinite individual from the group that the subject identifies. As noted by Kaškin (2018) and later on in this paper (Sections 4.5 and 4.7), reference to members of a known group is considered as definite in Mordvinic, and even indefinite pronouns that refer to an individual from two or more

known entities behave like definite expressions and are marked in object position accordingly. For this reason, I consider the reciprocal pronoun as anaphoric and definite in Mordvinic and explain the ungrammaticality of the objective conjugation in these structures with their displaying a lower degree of transitivity.

The participants of reciprocal constructions are active and affected at the same time. Therefore, reciprocals are considered to be describing a semantically lower degree of transitivity than basic transitive clauses, which may be reflected in the structures of reciprocals. (See Kittilä 2002a: 394–397.) According to Kittilä (2002b) reciprocals are closer to basic transitive sentences than reflexives, since in reciprocal constructions there are at least two participants present. Mordvinic contradicts the expectations, as the verb can be in the objective conjugation in reflexive constructions, but not in reciprocal ones. The objective conjugation is a marker of high transitivity in Mordvinic (see Grünthal 2008) and is used in constructions that are termed as basic transitive sentences by Kittilä (2002b). Nevertheless, according to Dixon (2012: 154), if reciprocals are expressed with pronouns, reflexives must also be expressed with pronouns; but the same is not true in the opposite direction. Therefore, there are languages where reciprocals are encoded in intransitive constructions, while reflexives are in transitive constructions. This might imply that reflexives display, contradicting Kittilä's (2002b) expectations, a higher degree of transitivity. This seems to be the case in Mordvinic as well since the verb can stand in the objective conjugation in reflexive constructions but not in reciprocal ones.

Reciprocals are the only type of pronominal objects that cannot stand with a verb in the objective conjugation either in Erzya or in Moksha, even though their referent is identifiable, and they get object marking. Therefore, reciprocal constructions diverge from other constructions with definite objects, which can be explained by reciprocal constructions describing a semantically lowly transitive event.

#### 4.5. Interrogative pronouns

Interrogative pronouns are used primarily in questions and refer to an entity that is unknown to the speaker. From this respect, interrogative pronouns can be considered as indefinites from a cross-linguistic point of view, as they express lack of knowledge. (See Bhat 2004: 227–228.) Nevertheless, in Mordvinic, interrogative pronouns can be marked in object

position and the verb can stand in the objective conjugation with them. Therefore, it is important to investigate their semantics in greater detail and its correlation with their morphosyntactic structure.

Mordvinic has three sets of interrogative pronouns, E *meže*, M *mežä* ‘what’ with non-human referents, E *ki*, *kije* M *ki*, *kijä* ‘who’ with human referents and E M *kona* ‘which’, which implies choice from a known group (Bartens 1999: 115–117). The pronoun *kona* does not occur in the material and therefore I discussed its usage with native speakers.

The non-human interrogative pronoun is left without case marking in object function and the verb always stands in the subjective conjugation with it (see also Xolodilova (2018: 106–107) for Moksha). Thus, the non-human interrogative pronoun behaves as expected.

The interrogative pronoun *ki* expresses the same type of indefiniteness as the non-human one, but it is in the basic genitive in object function. The case ending of this pronoun is the same as with the personal and demonstrative pronouns which have identifiable referents. According to native speakers, the verb can stand in both the subjective and the objective conjugation with the human interrogative pronoun, which is illustrated in (20). This example was elicited from native speakers, as the source material does not contain genuine questions with the human interrogative pronoun.

- (20) *Ki-ń*      *ńäj-ít* /      *ńäjə-ít*      *univeršitet-sta*,  
 who-GEN    see-PST.2SG>3SG    see-PST.2SG    university-ELA  
*məžarda*    *tosa*    *ul’ə-ít?*  
 when        there    be-PST.2SG  
 ‘Who did you meet at the university when you were there?’  
 (M: Ekaterina Kirdjaškina, p.c.)

As the example shows, both conjugation types are possible. The choice of conjugation changes the interpretation of the sentence: the objective conjugation implies that the speaker knows that the listener met someone at the university, whereas the subjective conjugation has no such implications. Therefore, the change in verbal conjugation renders a more specific reading to the pronoun, without changing the declension type or case of the pronoun itself.<sup>7</sup>

7. In exclamatory and rhetorical sentences, where the speaker knows the referent of the pronoun, the human interrogative pronoun behaves like a definite NP and it allows verbal agreement. Once again, this reading is captured by the

The interrogative pronoun *kona* ‘which’ refers to someone or something from two or more known entities. This pronoun does not occur in the data. In Erzya and Moksha, nouns referring to members of a known group behave like definite NPs and can be in the definite declension (see Kaškin (2018: 136–138) for Moksha). Therefore, it is expected that this pronoun is in the genitive in object function and the verb can stand in the objective conjugation with it. According to native speakers, the pronoun is in the definite declension in Erzya, *kona-ńt* [which-DEF.GEN] ‘which one’ and it can be either in the basic or possessive genitive in Moksha, *kona-n-c* [which-GEN-POSS.3SG] or *kona-ń* [which-GEN] ‘which one’. The use of this pronoun is illustrated in (21).

(21)<sup>8</sup> [*Isak kafta końcǽrtt ul’št Saranskäjsa.*]

***Kona-n-c***                      *ton*    *van-it’?*  
 which-GEN-POSS.3SG    2SG    watch-PST.2SG>3SG

‘[There were two concerts in Saransk yesterday.] Which one did you see?’ (M: Ekaterina Kirdjaškina, p.c.)

The three interrogative pronouns display different morphosyntactic features in object function. The non-human interrogative pronoun, E *meže*, M *mežä* ‘what’ is unmarked in object function and the verb always stands in the subjective conjugation with it. The human interrogative pronoun, *ki* ‘who’ gets object marking and the verb can stand in the objective conjugation with it. The objective conjugation is used in a restrictive meaning with this pronoun (see 20). The pronoun *kona* differs from the other two interrogative pronouns, as it refers to a member of a known group, thus its referent can be considered as definite. The pronoun *kona* behaves as a definite NP morphologically as well: it is in the genitive in object function and the verb can stand in the objective conjugation with it (see 21).

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conjugation type of the verb. This is shown in (i), where the speaker already knows the answer to his question.

(i) *Vašna=jak ki-ń            ńe-siž?*                      *Čańkod’e-v-i,*                      *moń!*  
 first=and    who-GEN    see-PRS.3PL>3SG    understand-PASS-PRS.3SG    1SG.GEN  
 ‘Who do they see first? Clearly, me!’ (E: Syatko-2007\_1\_133-143: 369-370)

8. This example is an addition to the material. A different verb occurs in these sentences, since it was difficult to construct a context for this pronoun with the perception verbs described in Section 2.

#### 4.6. Relative pronouns

Interrogative and relative pronouns are formally identical. All three interrogative pronouns, E *meže*, M *mežä* ‘what’, E M *ki* ‘who’ and E M *kona* ‘which’ can be used as relative pronouns. In the data, *ki* does not occur in this function.

This section focuses on the morphosyntactic behavior of relative pronouns in object function. The morphosyntactic differences between *kona* and E *meže*, M *mežä* imply that these pronouns have different functions. The pronoun *kona* behaves like a definite expression: it gets object marking and the verb most often stands in the objective conjugation with it. E *meže*, M *mežä*, on the other hand, behaves like an indefinite NP in most of the cases, as it frequently lacks object marking and often occurs with the verb in the subjective conjugation. Nevertheless, the morphosyntactic marking on E *meže*, M *mežä* varies. E *meže*, M *mežä* can be used either in the nominative or the genitive case in object function. The marking on the pronoun correlates with verbal conjugation: the verb can stand in the objective conjugation with this pronoun only if it is in the genitive, whereas if the pronoun is in the nominative, the verb is in the subjective conjugation. In the Erzya material, *meže* is found 31 times in the nominative as object, and 11 in the definite genitive. In Moksha, *mežä* is found 36 times in the nominative and 5 times in the definite genitive.

I explain the different morphosyntax of *kona* and E *meže*, M *mežä* with the structure of the relative clause and the features of the head. The pronoun *kona* is used in externally headed relative clauses with reference to full NPs, whereas E *meže*, M *mežä* is preferred with so-called light heads (demonstratives and quantifiers) and in headless constructions. In internally headed relative clauses, *kona* can occur only in adnominal function within a NP. As a pronoun, only E *meže*, M *mežä* is used as an internal head.

The head of the pronoun *kona* can have any function in the main clause (Aralova & Brykina 2012: 525–526; Privizenceva 2018: 727–730). In object function, *kona* is usually in the basic genitive in the singular and in the definite genitive in the plural in both languages. The use of *kona* as a relative pronoun is illustrated in (22).

- (22) – – *sərgəž-ś-t*      *p̄ra-sə-nza*      *śembä*      *stalmə-t-ńä*,  
 stir-PST-3PL      head-INE-POSS.3SG      all      burden-PL-DEF  
*kona-t-ńä-ń*      *ńäjə-žəń*      *mirďə-n-c*      *marta*.  
 which-PL-DEF-GEN      see-PST.3SG>3PL      husband-GEN-POSS.3SG      with  
 ‘– – all the burdens that she experienced with her husband stirred in  
 her head.’ (M: Moksha-2003\_4\_90-107: 98–100)

The choice between *kona* and E *meže*, M *mežä* seems to depend on semantic rather than morphosyntactic factors. E *meže*, M *mežä* is frequent in constructions with demonstratives and universal quantifiers as heads, i.e. in light-headed constructions according to Citko’s (2004) terminology. The pronoun *kona* can occur in light-headed constructions if the referent of the head is individualized, as in (23). In this example, the pronoun refers to a human antecedent, which is mentioned in the preceding sentence. E *meže*, M *mežä* is used more frequently with abstract heads, the meaning of which is established in the relative clause. This is illustrated in (24).

- (23) *Pandočama-va-ńt*      *eskeľa-ś-t*      *soldat-t*.      *Śe-t-ńe*,  
 hill.side-PROL-DEF      pace-PST-3PL      soldier-PL      that-PL-DEF  
*kona-t-ńe-ń*      *vokzal-sto*      *ńe-i-ńže*.  
 which-PL-DEF-GEN      station-ELA      see-PST-3SG>3PL  
 ‘Soldiers paced on the hillside. The ones whom he saw at the station.’  
 (E: Syatko-2004\_7\_49-64: 628)

- (24) *Mon*      *χudožnik-an*,      *śas*      *tejnä*      *maštə-ma*  
 1SG      artist-1SG      therefore      1SG.DAT      can-NMLZ  
*ńäjə-mə-nza*      *śä-ń*,      *mež-t*      *af*  
 see-NMLZ-POSS.3SG      that-GEN      what-DEF.GEN      NEG  
*ńäj-saž*      *lijä-t-ńä*.  
 see-PRS.3PL>3SG      other-PL-DEF  
 ‘I am an artist, therefore I have the skill of seeing what others  
 cannot.’ (M: Moksha-2005\_3-4\_190-197: 266)

Apart from light-headed constructions, E *meže*, M *mežä* is frequently attested in headless relative clauses. Privizenceva (2018: 711) mentions that all three relative pronouns (*kona*, *meže*, *kijä*) can occur in headless relative clauses in Moksha. I assume that the choice between these pronouns is influenced by similar semantic factors as in light-headed relative clauses: *kona* implies a more individualized meaning. The present study cannot

prove this assumption, since *kona* does not occur in headless relative clauses in the data. The use of E *meže*, M *mežä* in headless relative clauses is shown in (25).

- (25) *Šäl'dü Fed'ka-ś azə-ndə-žü Vaška-ti, mežä*  
 then F.-DEF tell-FREQ-PST.3SG>3SG V.-DEF.DAT what  
*kul'-ś šobdava.*  
 hear-PST.3SG morning  
 ‘Then Fed’ka told Vaška what he had heard in the morning.’  
 (M: Moksha-2005\_1-2\_156-170: 311–312)

In internally headed relative clauses, only *mežä* and *kijä* are used as pronouns, whereas *kona* is used only in adnominal function (see Privizenceva (2018: 719–727) for Moksha). Pronouns in adnominal functions are not considered in the present paper. The source material contains only E *meže*, M *mežä* in internally headed relative clauses.

Internally headed relative clauses do not necessarily have a corresponding element in the main clause, which is shown in (26). Corresponding pronouns can nonetheless appear. These elements are similar to light heads, as illustrated in (27) where the corresponding element is the universal quantifier.

- (26) *Mežä näj-ś ki-t' kučka-sa, päk*  
 what see-PST.3SG road-DEF.GEN middle-INE very  
*iž tu mäľ-əz-ənza.*  
 NEG.PST.3SG go.CNG mind-ILL-POSS.3SG  
 ‘What he saw in the middle of the road, he did not really like.’  
 (M: Moksha-2006\_8\_136-139: 37)

- (27) *Mežä näj-ś, mežä kul'-ś komand'irovka-sa*  
 what see-PST.3SG what hear-PST.3SG business.trip-INE  
*ulə-ndə-mstə-nza, šembə-ś arśə-ś*  
 be-FREQ-GER-POSS.3SG everything-DEF turn-PST.3SG  
*očerk-ənd'i, reportaž-ənd'i, fel'jeton-ənd'i*  
 study-DAT report-DAT satirical.article-DAT  
*koža maťerial-ks.*  
 rich material-TRSL  
 ‘What he saw, what he heard while he was on business trips, everything turned out to be a rich material for studies, reports and satirical articles.’ (M: Moksha-2006\_12\_81-87: 85–87)

Furthermore, E *meže*, M *mežä* can refer to the whole preceding clause or to parts of the preceding clause, as in (28). In this sentence, it refers to the main clause.

- (28) *T'ev-ən-c*                      *tijə-ńđə-žü*                      *päk*    *lac*,  
 work-GEN-POSS.3SG    do-FREQ-PST.3SG>3SG    very    well  
*mež-ť*                      *kurəksta*    *ńäjə-ž*                      *rajon-əń*    *očuńä-ť-ńä* – –  
 what-DEF.GEN    soon            see-PST.3PL>3    region-GEN    elder-PL-DEF  
 ‘He did his job very well, which the village elders soon realized – –’  
 (M: Moksha-2006\_5\_15-18: 110)

After discussing the factors that influence choosing the relative pronouns, I examine in greater detail the morphosyntax of these pronouns and its correlation with the reference of the pronoun. The relative pronoun, *kona*, gets object marking (the choice between definite and basic declension depends on number marking), and the verb most often stands in the objective conjugation with it (see 22). The pronoun *kona*, therefore, behaves like definite NPs. This is expected, since *kona* is typically used anaphorically and it refers to a NP in the main clause.

The morphosyntax of the relative pronoun E *meže*, M *mežä* is more complicated. This pronoun can be either in the basic nominative or in the definite genitive as an object. What exactly influences the choice of the declension type of the pronoun, cannot be determined based on the source material of this study. If the pronoun refers to the preceding clause, it is in the definite genitive in both languages. In light-headed and headless relative clauses, the case marking of the pronoun seems to be in free variation, nevertheless, the pronoun is most frequently in the basic nominative in these contexts. The reasons for this may be that light heads are vaguely defined, and thus their reference is not always identifiable.

#### 4.7. Indefinite pronouns

Indefinite pronouns display an interesting behavior in Mordvinic: even though they refer to unidentifiable entities, those pronouns that refer to humans and to a member of a known group are in the genitive in object function and the verb can stand in the objective conjugation with them. Therefore, it is necessary to take a detailed look at their semantics to reveal the correlation between definiteness and differential object marking.

The Mordvinic indefinite pronouns are based on the interrogative pronouns. Indefinite pronouns are formed with indefiniteness markers preceding or following the interrogative, with the reduplication of the interrogative and on rare occasions, the basic form of the interrogative can be used as well. (See Bartens 1999: 117–118; Agafonova 2000: 141; Bikina 2018: 186.) Mordvinic does not have separate negative pronouns, but the additional particle gets a negative reading in negated sentences. In Erzya *-Cak*<sup>9</sup> (Hamari & Aasmäe 2015: 310–311), and in Moksha the particles *-Cək* and *-CA*<sup>10</sup> (Bikina 2018: 197–199) are used in negated sentences.

The different forms of indefinite pronouns are used in different contexts, depending on referential features (specific or non-specific), or on other factors (e.g. negation, indirect negation, irrealis mood, comparative constructions). The features of the Moksha indefinite pronouns are described in detail in Bikina (2018). The Erzya indefinite pronouns are formally similar to the Moksha ones, but their semantics and the possible differences between the languages have not been examined before. This section discusses the morphosyntactic features of indefinite pronouns in object function and their correlation with verbal conjugation.

The indefinite pronouns show the same human–non-human distinction as the interrogative ones, and they behave in a similar way as well. The inanimate indefinite pronoun is usually in the basic declension nominative in object function and the verb cannot stand in the objective conjugation with it. The only exception is when the indefinite pronoun refers to a member of a known group, in which case it is in the definite genitive and the verb agrees with it (Kaškin 2018: 138). Such structures are not attested in the data.

The human indefinite pronoun is in the basic genitive as object, i.e. it gets the same ending as pronouns which are used in a definite meaning, e.g. personal and demonstrative pronouns. This is illustrated in (29).

- (29) *Ńä-i-ňä*            *ťa-sta*            *koj-ki-ń.*  
 see-PST-1SG>3    there-ELA    INDF-who-GEN  
 ‘I saw someone there.’ (M: Moksha-2007\_6\_105-106: 43)

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9. The initial consonant can either be *j* (after vowels), *g* (after voiced consonants) or *k* (after voiceless consonants) (Bartens 1999: 118).

10. In Moksha, vowels can be followed by *-vək* or *-gək*, vowels or voiced consonants by *-gäl-ga*, voiceless consonants by *-ka/-kä* (Bartens 1999: 118).

Example (29) shows that the verb can stand in the objective conjugation with the indefinite pronoun. In the Moksha data, there are two examples of this structure. Similar examples do not occur in the Erzya data, therefore I searched the Erzya corpus for indefinite pronouns to reveal whether the verb can stand in the objective conjugation with the indefinite pronoun. The corpus proved that similar structures are used in Erzya as well.

The variation of verbal conjugation captures the same semantics as in the case of interrogative pronouns: the objective conjugation expresses a more specific reading. In (29), the speaker is in the Institute of Cinematography in Moscow. The objective conjugation implies that it was not just someone the speaker saw, but specifically someone belonging to the Institute. The subjective conjugation does not imply a similar restrictive meaning. If the verb were in the subjective conjugation in (29), the construction would refer to anyone who happened to be at the Institute. Therefore, the objective conjugation expresses that the pronoun refers to a member of a group, whereas the marking on the pronoun is unchanged.

The pronoun *kona* ‘which’ can be used as an indefinite pronoun as well. It is only formally similar to the other indefinite pronouns, but not semantically. The pronoun *kona* is used in a definite meaning, as it always refers to members of a known group, and moreover *kona* is in the genitive in object function and the verb can stand in the objective conjugation with it. This is illustrated in (30).<sup>11</sup>

- (30) [Ruzoń morońńede baška końcertseńt gajgšt eržań, mokšoń morotkak.]

**Koj-kona-ť-ńe-ń**                      *kunsol-ića-ť-ńe*  
 INDF-which-PL-DEF-GEN      listen-PTCP.PRS-PL-DEF

**mař-iž**                                  *vašeńće-dě.*  
 hear-PST.3PL>3              first-ABL

[In addition to the Russian songs, Erzya and Moksha songs were played at the concert as well.] The audience heard some of them for the first time.’ (E: EP-2006\_1-ijuń\_12a: 35–36)

Indefinite pronouns share both formal and morphosyntactic similarities with interrogative ones. The non-human indefinite pronoun is in the basic

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11. Since the indefinite pronoun *kona* occurred only once in the source material, I searched the corpus for more examples with this pronoun to draw a more detailed conclusion on its use.

nominative in object function and the verb always stands in the subjective conjugation with it. The human indefinite and interrogative pronouns are marked in object function and the verb can be used in the objective conjugation with them. The pronoun *kona* behaves like a definite expression in Mordvinic, and this behavior results from its use: *kona* refers to a member of a known group. The morphosyntax of the pronoun correlates with its semantics: the pronoun is in the genitive in object function and the verb can stand in the objective conjugation with it.

#### 4.8. Universal quantifying pronouns

The universal quantifying pronoun E *veše*, *vešeme*, M *šembä* ‘everything’, refers to either absolute or contextual totality. Universal quantifiers can be considered as definite expressions since they convey the meaning of inclusiveness (Lyons 1999: 32–33). In this section, I discuss how the semantics of this pronoun correlates with its morphosyntax.

In Moksha, the pronoun *šembä* is in the definite genitive in object function, as illustrated in (31). In Erzya, on the other hand, the universal quantifying pronoun has two forms, either *veše* or *vešeme*. In the literary language the form *vešeme* is used most frequently in object function, and it is in the definite declension genitive, similarly to Moksha *šembä*. In the data, there are two sentences where the form *veše* is used in object function. This pronoun is indeclinable, as illustrated in (32). According to Nina Agafonova (p.c.), an expert on Erzya dialects, *veše* is primarily used in the Southwestern dialects of Erzya, as these dialects lack the form *vešeme*. This form is nevertheless attested in the literary language as well.

- (31) *Jaka-j*      *viř-gä*,      *šembä-t*      *ňäj-si*, – –  
 go-PRS.3SG forest-PROL all-DEF.GEN see-PRS.3SG>3SG  
 ‘She walks in the forest, sees everything, – –’  
 (M: Moksha-2007\_9\_98-115: 54-55)

- (32) *Veše*    *mař-i-nk?*  
 all      hear-PST-2PL>3  
 ‘Did you hear everything?’ (E: Syatko-2004\_4\_32-69: 742)

The universal quantifying pronouns behave like definite NPs in both languages: they are marked in object function and the verb can stand in the objective conjugation with them. Only the Southwestern dialects of Erzya

seem to diverge from this pattern, where the pronoun is undeclined in object function. Nevertheless, the verb can stand in the objective conjugation with the undeclined pronoun as well.

## 5. Conclusions

This paper has examined the morphosyntactic behavior of the pronominal class in the light of their referential features. The pronominal class has inherently definite (e.g. personal and demonstrative pronouns) and indefinite (e.g. indefinite pronouns) members, thus they can provide a better understanding of differential object marking and indexation.

The correlation between the referential features of pronouns and their morphosyntactic behavior is less straightforward than in the case of nouns. Pronouns that are used anaphorically, discourse deictically or with reference to totality (personal, demonstrative, reflexive, reciprocal, relative and universal quantifying pronouns) are definite and are accordingly in the genitive in object function. Nevertheless, the verb cannot stand in the objective conjugation with the reciprocal pronouns. Moreover, human indefinite and interrogative pronouns are also in the genitive in object function, even though their referent is unidentifiable. Thus, genitive marking on the object component is a necessary feature for triggering the objective conjugation, but it alone does not determine whether the verb can stand in the objective conjugation or not. The results of the study are compiled in Table 5.

Table 5 shows the declension type and case marking of pronouns and whether the verb can stand in the objective conjugation with them. The present study reveals that not only definite objects are marked with the genitive case, but also indefinite objects with human referents. Therefore, animacy also influences differential object marking in Mordvinic, at least to some degree. Furthermore, this study also complements the understanding of the semantics of the objective conjugation. With the human interrogative and indefinite pronouns, the objective conjugation can be used in a restrictive sense, i.e. it expresses that the pronoun refers to a member of a known group, while the marking of the pronoun is unchanged. Therefore, with the variation of conjugation type a more specific reading can be encoded apart from aspectual oppositions.

Table 5: The morphosyntax of pronouns in object function

| Pronouns                       | Declension type            | Object marking    | Objective conjugation <sup>a</sup>                           |
|--------------------------------|----------------------------|-------------------|--|
| Personal pronouns              | basic                      | genitive          | +  |
| Demonstrative pronouns         | basic (definite in plural) | genitive          | +  |
| Reflexive pronouns             | possessive                 | genitive          | +  |
| Reciprocal pronouns            | basic                      | genitive          | –  |
| Interrogative pronouns         | <i>meže, mežä</i>          | basic             | nominative –   |
|                                | <i>ki</i>                  | basic             | genitive +   |
|                                | <i>kona</i>                | basic             | genitive +   |
| Relative pronouns              | <i>meže, mežä</i>          | basic or definite | nominative or genitive depends on the marking of the pronoun |
|                                | <i>kona</i>                | basic or definite | genitive +   |
| Indefinite pronouns            | <i>meže, mežä</i>          | basic             | nominative –   |
|                                | <i>ki</i>                  | basic             | genitive +   |
|                                | <i>kona</i>                | basic             | genitive +   |
| Universal quantifying pronouns | definite                   | genitive          | +  |

a. + marks that objective conjugation is allowed, – marks that it is not allowed.

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## Nonstandard abbreviations used in glosses

|      |               |      |                   |
|------|---------------|------|-------------------|
| CNG  | connegative   | NEG  | negation verb     |
| CPR  | comparative   | POSS | possessive suffix |
| DAT  | dative        | PP   | postposition      |
| DIM  | diminutive    | PROL | prolative         |
| ELA  | elative       | PST  | first past tense  |
| FREQ | frequentative | PST2 | second past tense |
| GER  | gerund        | REFL | reflexive pronoun |
| ILL  | illative      | TRSL | translative       |
| INE  | inessive      |      |                   |

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