Chapter 1

The negative existential cycle in Moksha Mordvin: From a negative existential into a negative auxiliary

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Moksha (Mordvin, Uralic) has a complex negation system with several negative markers. I examine two of these markers: the negative existential *aš* (~ *ajaš*) and the past tense negative auxiliary *aš-*. This auxiliary is generally assumed to have developed when the negative existential *aš* acquired the additional function of an auxiliary. This study demonstrates that the negative existential cycle provides a framework to understand the development of the negative existential into a negative auxiliary; the negative existential entered the verbal domain as the short answer 'no' and was fused with the older negative auxiliary *iź-*, which continues to be used as an alternative to *aš-*. This study is based on the analysis of corpus data: First, to clarify their relationship in the contemporary language, the different functions of the negative existential are introduced. Second, the competing paradigms of the two negative auxiliaries *aš-* and *iź-* are investigated.

Keywords: Uralic, Moksha, negative existential, negative auxiliary, past tense

1 Introduction

Moksha and its closest sister language, Erzya, form the Mordvin branch of the Uralic language family. The Proto-Mordvin period began in approximately 1500 BCE and this period was preceded by a protolanguage that was common to the Mordvin, Finnic, and Saami languages. The division of Proto-Mordvin into Moksha and Erzya probably began around the eighth century CE (Bartens 1999: 13–15; Keresztes 2011: 13–14).

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The Mordvin languages are spoken in Russia, with less than half of Mordvins living in the autonomous Republic of Mordovia, which is situated in the middle course of the Volga. The remaining Mordvins reside in the surrounding provinces of the Russian Federation as well as in the neighboring republics of Chuvashia and Tatarstan. According to the latest census of the Russian Federation in 2010, there are approximately 806,000[1] ethnic Mordvins. Of these, 431,600 were reported to have mastered either Erzya or Moksha, although no reliable data is available on their native languages. However, it is estimated that around a third of the speakers speak Moksha, while two-thirds speak Erzya. The number of speakers of both languages are declining, as Russian is replacing them, especially among the younger generations.

The negation system of both Mordvin languages is known to be complex. Both languages have different types of negative markers and their distribution is determined by factors such as the type of clause, type of predicate, tense, and mood. The system can be explained predominantly by innovations that occurred during the Proto-Mordvin period and are therefore shared by both sister languages (Bartens 1999: 140–144; Hamari 2007, 2011, 2013, Hamari & Aasmäe 2015). However, the situation is somewhat different for the negative existentials. The Moksha and Erzya languages have a special negator for existential and possessive clauses (Moksha *aš*[2] ~ *ajaš* and Erzya *araś*), but the origin of both negators is uncertain and no common source can be reconstructed for these markers. In addition, only Moksha *aš* has further developed the function of a past tense negative auxiliary. Moksha also has an older past tense negative auxiliary *iź-* (dialectally *əź-*), which has the etymological cognate *eź-* in Erzya.

The purpose of this paper is to examine the development of the Moksha existential marker *aš* into a past tense negative auxiliary *aš-* of verbal clauses from the viewpoint of the negative existential cycle originally described by Croft (1991). I will begin the examination in §3 by providing an overview of the negative constructions reconstructed for Proto-Uralic and of what is known about the development of negative existentials in Uralic languages. In §4, I will introduce the negation system of Moksha to clarify the functions of the different negative markers. In §5, I examine the several functions of the Moksha negative existential *aš*.

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[1]According to some sources, the number is 744,237 (for example, see Hamari & Aasmäe 2015). However, this smaller figure does not include the persons who declared themselves either as Erzyas or Mokshas rather than Mordvins (cf. http://www.gks.ru/free_doc/new_-site/perepis2010/croc/Documents/Vol4/pub-04-01.pdf).

[2]For purposes of this study, the negative existential is referred to as *aš*, while the negative auxiliary with the same stem is marked with a hyphen, that is, *aš-*. This is because the negative existential can appear without further inflection, whereas the negative auxiliary always has a personal ending following the stem.

In §6, in order to determine the current situation for the negative existential cycle in the language, I will analyze the contemporary uses of the negative auxiliary *aš-* and its relationship to the auxiliary *iź-*. The development of the negative existential *aš* and the auxiliary *aš-* is discussed in §7 and conclusions are presented in §8.

I previously studied the functions of the Moksha negative markers – including the existential *aš* and auxliliary *aš-* in Hamari (2007, 2013). However, this paper examines their mutual relationship in the contemporary language in the light of new data, and discusses the historical development of the functions in closer detail than in the earlier studies.

The data for the present study were gathered from an electronic corpus referred to as MokshEr. The corpus is administered by The Research Unit for Volgaic Languages at the University of Turku. This corpus includes literary texts, such as journals and newspapers from the years 2002–2005, as well as works of fiction. The size of the corpus is approximately 485,000 words. The references to MokshEr indicate the locations of the data within the corpus itself.

2 Transcription

The Uralic Phonetic Alphabet (also known as the Finno-Ugric transcription system) was adopted to transcribe Moksha (see Sovijärvi & Peltola 1977). It is important to mention that Moksha has a reduced vowel /ə/ that usually occurs in an unstressed position, predominantly in non-initial syllables but also in unstressed initial syllables. This reduced vowel has both velar and palatal allophones. The Uralic Phonetic Alphabet represents the palatal allophone as /ə/ and the velar as /ə̑/. In the transcriptions of the present study, the Moksha reduced vowel is indicated by a /ə/ but its velar and palatal allophones are not differentiated.

3 Negative markers in the Uralic languages

Two negative markers are reconstructed in the Uralic protolanguage: the negative auxiliary *$^*e$-* in standard negation, and the imperative auxiliary *$^*elV$-*, which may have been some type of extension or a supplementary form of *$^*e$-* (Janhunen 1982: 37). According to Janhunen, the negative auxiliaries probably carried the marking of the subject person, tense, and mood, while the lexical verb had a fixed form with a suffix in *$^*-k$*[3]. This suffix was most likely an original nominalizer of

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[3]In Uralic linguistics, the form of the lexical verb that occurs in a negative auxiliary is often referred to as a connegative.

verbs, and it was also used to mark the imperative of the second person singular in the affirmative. Honti (1997: 241–242) argues that as the form of the lexical verb in standard negation was originally based on a nominalized verb form, the negative constructions could have originated as copula clauses with a negative copula verb, as in *e-m mene-k 'I am not a goer' (*-*m* '1SG', *mene- 'go') > 'I don't go, I am not going'. Most, but not all, contemporary Uralic languages have retained at least some traces of the original negative markers *e- and/or *elV- in their negation of verbal clauses; in many languages, these are still negative auxiliaries with conjugational properties but in others, some form of the auxiliary may have developed into a generalized negative particle (for example, see Comrie 1981).

In addition to the negators of verbal clauses, many Uralic languages have separate negative markers for non-verbal clauses. Veselinova (2015) examines the special negators in the Uralic languages that negate stative predications, that is, predications without a verbal predicate. Veselinova concludes that this language family has three types of special negators: (i) *Negative existentials* are most typically used to negate existence, location, and possession; (ii) *Ascriptive negators* are used to negate predications in identity, class inclusion, and property attribution; and (iii) *General stative negators* negate all stative predications. The special negators that most widely occur in the Uralic languages are negative existentials and while ascriptive negators are also rather common, general stative negators only occur in Udmurt and in (now extinct) Kamas. None of these negators, however, descend from Proto-Uralic but instead must be regarded as more recent innovations (see Veselinova 2015: 567–568, 570–571, 572 for references to diachronic information). As a consequence, if special negators of stative predications existed in Proto-Uralic, no evidence can be found in the daughter languages to suggest this.

The development of negative existentials that occur in contemporary Uralic languages differ. Veselinova (2015: 566–567) concludes that a negative existential can be (a) a fusion of a negative marker and a (nominalized) form of a copula or copula-like verb, (b) a specified function of a particular form of the original negative verb, (c) a reanalysis of a word with an inherently negative content, or (d) a borrowing. Furthermore, as Bartens (1996, in passim) observes, both the affirmative and negative existentials of Uralic languages typically have nominal properties. As I later demonstrate in §7.1, mechanisms that are usually suggested as explanations for the development of the Moksha negative existential are the fusion of a negative marker and a copula-like verb or reanalysis.

4 Negation in Moksha

The complexity of the Mordvin negation systems and their development have been addressed in several studies (for example, see Bartens 1999: 140–144; Keresztes 2011: 87–87; Hamari 2007, 2011, 2013), and I will therefore not provide a full account of negation in Moksha. The formation of verbal negation in Moksha is summarized in Table 1. Moksha is a pro-drop language and the person and number of the subject are expressed in the verbal suffixes. This means that the examples of both negative and affirmative constructions in Table 1 can be considered full clauses.

As can be seen in Table 1, the negation patterns of the present and second past tense indicative as well as the conditional and conditional-conjunctive moods are symmetric: The only difference between the affirmative and negative verb forms is the existence of the negative particle before the inflected predicate verb in the negative construction. The negation of all other verb forms is asymmetric: These forms are negated by negative auxiliaries followed by an invariant connegative form of the lexical verb, which means that the marking of finiteness appears in the negative marker instead of the lexical verb. (see Miestamo (2005) for a

Table 1: The negation of verbal clauses in Moksha

Tense	Negator	Example of a negative clause	Corresponding affirmative clause
Present tense	particle *af*	*af mor-an* NEG sing-PRS.1SG 'I do not sing/ I am not singing/ I will not sing'	*mor-an* sing-PRS.1SG 'I sing/ I am singing/ I will sing'
Indicative			
First past tense	a) auxiliary *iź-*	*iź-əń mora* NEG.PST-PST.1SG sing.CNG 'I did not sing'	*mora-ń* sing-PST.1SG 'I sang'
	b) auxiliary *aš-*	*aš-əń mora* NEG.PST-PST.1SG sing.CNG 'I did not sing'	
Second past tense	particle *af*	*af mora-ľəń* NEG sing-PST.1SG 'I didn't use to sing'	*mora-ľəń* sing-PST.1SG 'I used to sing'

	Negator	Example of a negative clause	Corresponding affirmative clause
Imperative			
	auxiliary *ťa-*	*ťa-t mora* NEG.IMP-2SG sing.CNG 'do not sing'	*mora-k* sing-IMP.2SG 'sing'
Optative			
	auxiliary *ťa*	*ťa-z-at mora* NEG.IMP-OPT-2SG sing.CNG 'may you not sing'	*mora-z-at* sing-OPT-2SG 'may you sing'
Desiderative			
	auxiliary *afəľ-*	*afəľə-ksəľəń mora* NEG-DES.1SG sing.CNG 'I didn't intend to sing'	*mora-ľəksəľəń* sing-DES.1SG 'I intended to sing'
Conjunctive			
	auxiliary *afəľ-*	*afəľəńmora* NEG.CONJ.1SG sing.CNG 'if I did not sing'	*mora-ľəń* sing-CONJ.1SG 'if I sang'
Conditional			
	particle *af*	*af mora-ńďäŕa-n* NEG sing-COND-1SG 'if I do not sing'	*mora-ńďäŕa-n* sing-COND-1SG 'if I sing'
Conditional-conjunctive			
	particle *af*	*af mora-ńďäŕaľəń* NEG sing-COND.CONJ.1SG 'if I hadn't sung'	*mora-ńďäŕaľəń* sing-COND.CONJ.1SG 'if I had sung'

detailed study on symmetric and asymmetric negation). However, the negative auxiliary *afəľ-* of the desiderative and the conjunctive moods has most likely developed from a fusion of the particle *af* and the inflected form of the verb *uľə-* 'be' (for example, see Bartens 1999: 142).

In addition to the negative markers presented in Table 1, there are two negative suffixes: *-fťäŕa-/-fťäŕä-* of the conditional and *-fťäŕaľə-/-fťäŕäľə-* of the conditional-conjunctive mood (Klemm 1934: 392–393; Paasonen 1953: 012; Pall 1957: 221; Bartens 1999: 141). These suffixes are fusions of the negative particle *af* and the following auxiliary verbs: **ťäŕa-* 'try' for the conditional and both **ťäŕa-* 'try' and *uľə-* 'be' for the conditional-conjunctive (Bartens 1999: 129–137). The auxil-

iary constructions followed the connegatives of the lexical verbs and finally agglutinated with them. However, the suffixes are extremely rare in contemporary Moksha, which prefers constructions formed on the particle *af* and the affirmative form of the lexical verb.

According to the classification proposed by Veselinova (2015), Moksha belongs to the group of the Uralic languages that have a negative existential but no other special negators for non-verbal (or stative) predications. The negative particle *af* that occurs in verbal negation is used to negate ascriptive clauses, while the negative existential *aš* (with a longer variant *ajaš*) occurs in existential and possessive clauses. In locative clauses, both are possible but with certain semantic differences (see §5.3). Table 2 illustrates the functions of the different negators of the non-verbal predications in the present tense and Table 3 lists the functions of the negators in the past tense.

Finally, the negative particle *apak* is used to negate participles and converbs. As both affirmative and negative participles can occur in the predicate position, *apak* could also be regarded as a negator of non-verbal clauses. In this analysis, however, I will exclude these clauses because they are not prototypical stative expressions as the predicates have a verbal basis.

Before moving on to the functions of *aš* and *ajaš*, it is necessary to clarify how predication is expressed in Moksha. As presented in Table 2 and Table 3, the non-verbal predicates of ascriptive and locative clauses take the verbal personal suffixes and agree with the subject person and number. In the present tense, these suffixes are the normal personal endings, except for the third persons. The third person singular of non-verbal predication has no personal ending, whereas the third person plural takes the plural suffix *-t/-t́* of nouns instead of that of verbs.[4]

The situation for the past tense is slightly more complicated. In verbal predication, there are two past tense categories. The first past tense which is unmarked (for instance, *mora-ń* 'I sang') and the second past tense which has a habitual or progressive reading (such as *mora-ľəń* 'I used to sing, I was singing'). However, non-verbal predication only takes the second past tense, and in this case, it is unmarked, that is, it is not habitual or progressive but a neutral past tense (for example, *odə-ľəń* 'I was young').[5] Table 4 presents the tense suffixes that are possible for non-verbal as compared to verbal predicates of Moksha.

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[4]However, historically, the verbal suffixes of the third person forms can be traced to participial forms with the participle ending in *-i*. So the verb forms are, in fact, original nominal predicates with no person marking in the singular, and the plural ending in *-t/-t́* in the plural.

[5]Historically, the second past tense endings are personal forms of the verb *uľə-* 'be' that were attached to the predicate; this *uľə-* 'be' was conjugated in the first past tense.

Table 2: The negation of non-verbal clauses in the present tense in Moksha.

Negator	Example of a negative clause	Corresponding affirmative clause
Ascriptive		
af	(*mon*) *af od-an* 1SG NEG young-PRS.1SG 'I am not young'	(*mon*) *od-an* 1SG young-PRS.1SG 'I am young'
Existential		
a) *aš*	*pakśa-sa aš traktər* field-INE NEG tractor 'there is no tractor in the field'	*pakśa-sa uľ-i traktər* field-INE be-PRS.3SG tractor 'there is a tractor in the field'
b) *ajaš*	*pakśa-sa ajaš traktər* field-INE NEG tractor 'there is no tractor in the field'	
Possessive		
a) *aš*	*moń aš ćora-źä* 1SG.GEN NEG son-POSS.1SG.SG 'I don't have a son'	*moń uľ-i ćora-źä* 1SG.GEN be-PRS.3SG son-POSS.1SG.SG 'I have a son'
b) *ajaš*	*moń ajaš ćora-źä* 1SG.GEN NEG son-POSS.1SG.SG 'I don't have a son'	
Locative		
a) *af*	(*mon*) *af pakśa-s-an* 1SG NEG field-INE-PRS.1SG 'I am not in the field'	(*mon*) *pakśa-s-an* 1SG field-INE-PRS.1SG 'I am in the field'
b) *aš*	(*mon*) *aš-an pakśa-sa* 1SG NEG-PRS.1SG field-INE 'I am not in the field'	

Table 3: The negation of non-verbal clauses in the past tense in Moksha.

Negator	Example of a negative clause	Corresponding affirmative clause
Ascriptive		
af	(*mon*) *af odə-ľəń* 1SG NEG young-PST.1SG 'I was not young'	(*mon*) *odə-ľəń* 1SG young-PST.1SG 'I was young'
Existential		
aš	*pakśa-sa ašə-ľ traktər* field-INE NEG-PST.3SG tractor 'there was no tractor in the field'	*pakśa-sa uľ-ś traktər* field-INE be-PST.3SG tractor 'there was a tractor in the field'
Possessive		
aš	*moń ašə-ľ ćora-źä* 1SG.GEN NEG-PST.3SG son-POSS.1SG.SG I didn't have a son'	*moń uľ-ś ćora-źä* 1SG.GEN be-PST.3SG son-POSS.1SG.SG 'I had a son'
Locative		
a) *af*	(*mon*) *af pakśa-sə-ľəń* 1SG NEG field-INE-PST.1SG 'I was not in the field'	(*mon*) *pakśa-sə-ľəń* 1SG field-INE-PST.1SG 'I was in the field'
b) *aš*	(*mon*) *ašə-ľəń pakśa-sa* 1SG NEG-PST.1SG field-INE 'I was not in the field'	

Table 4: Non-verbal predication versus verbal predication in Moksha.

	Non-verbal predication of *od* 'young'		Verbal predication of *mora-* 'sing'		
	Present tense	Second past tense	Present tense	First past tense	Second past tense
1SG	*od-an*	*odə-ľəń*	*mor-an*	*mora-ń*	*mora-ľəń*
2SG	*od-at*	*odə-ľəť*	*mor-at*	*mora-ť*	*mora-ľəť*
3SG	*od*	*odə-ľ*	*mora-j*	*mora-ś*	*mora-ľ*
1PL	*od-tama*	*odə-ľəmä*	*mora-tama*	*mora-mä*	*mora-ľəmä*
2PL	*od-tada*	*odə-ľəďä*	*mora-tada*	*mora-ďä*	*mora-ľəďä*
3PL	*od-t*	*odə-ʟ̌t*	*mora-ɟ*	*mora-śť*	*mora-ʟ̌t*

5 The negative existential *aš*

5.1 The general properties of *aš*

If we adopt the definition suggested by Veselinova (2013: 118–139), we can state that Moksha *aš* behaves similarly to a prototypical negative existential. First, as will be demonstrated, it is difficult to pinpoint a specific word class that *aš* belongs to because it has different inflectional properties in different functions. Second, *aš* is used to negate existence, possession and location, which are the most common contexts for negative existentials cross-linguistically. Third, *aš* appears as a pro-sentence and a short word for 'no', which are also frequent uses of negative existentials. Fourth, in existential and possessive clauses, *aš* replaces the affirmative existential instead of negating it.

In the following, the functional and semantic properties of *aš* are considered in the order that reflects the order of frequency of functions found in the negative existentials cross-linguistically (Veselinova 2013: 118–119). In §5.2, existential and possessive clauses are examined together, as their prototypical negative constructions resemble each other, while locative clauses are analyzed separately in §5.3 due to their different predicational properties. §5.4 presents the use of *aš* as a negative pro-sentence and a negative interjection. Finally, the occurrences of *aš* as a noun are considered in §5.5.

5.2 Existential and possessive clauses

As the constructions of possessive clauses are rather similar to existential clauses, both clause types will be addressed in this section. I will first consider the affirmative constructions of these clause types and then focus on the negative forms.

In Moksha existential clauses, the subject of the sentence is in the indefinite nominative form and, being indefinite, it is necessarily in the third person (see Table 2). While the existential sentence may express the plain existence of the referent without further specifications of a location, a locative phrase can be present, as in (1). In the affirmative, the existential predicate is the third person form of the verb 'be', that is, (sg.) *uľi*, (pl.) *uľijť* (for more details, see Hamari 2007: 47–52).

(1) Kuχńa-sa   pľita uľ-i,   no son ušńə-ma penga-sa.
     kitchen-INE stove be-PRS.3SG but 3SG warn-INF firewood-INE
     'There is a stove in the kitchen, but it must be warmed with firewood.'
     [MokshEr-V.3/2002/16.txt]

In the possessive clauses, the possessor is often referred to by a noun or a pronoun in the genitive case.[6] Furthermore, the subject has a possessive suffix that refers to the possessor; as the possessor can be concluded from the possessive suffix, the noun or pronoun can be dropped, as in (2). In the affirmative, the forms of the verb 'be' are used as predicates. (see, for example, Hamari 2007: 52–57).

(2) Kudo-ńkä   uľ-i,   žuvata-ńkä   uľ-iɟť.
     house-POSS.1PL be-PRS.3SG cattle-POSS.1PL be-PRS.3PL
     'We have a house, we have cattle.' [MokshEr-V.3/Moksha/2005/22.txt]

Both *aš* and *ajaš* can occur in the negation of existential and possessive clauses, although *aš* is far more common than *ajaš*. Moreover, according to Nadezhda Kabaeva (p.c.), *ajaš* is regarded as a colloquial form, whereas *aš* is in general use both in the spoken and in the literary language. However, as both variants appeared in the written data of the present study, I will consider both of them.

In the present tense, *aš* and *ajaš* can be described as invariant negative predicates because neither of them agrees with a plural subject – unlike the affirmative predicate based on the verb 'be' that occurs in (1) and (2). Table 2 shows the present tense existential and possessive clauses with a singular subject, whereas in (3) and (4), a plural subject occurs.

(3) **Ajaš** trɑktəʀ-t, šariɟť   aš.
     NEG   tractor-PL wheel.PL NEG
     'There are no tractors, there are no wheels.' [MokshEr-V.3/Varia/C/1]

(4) a. Moń   **ɑš**   ćora-ńä.
         1SG.GEN NEG son-POSS.1SG.PL
         'I don't have sons.' [Nadezhda Kabaeva, p.c.]

     b. Moń   **ɑjɑš** ćora-ńä.
         1SG.GEN NEG son-POSS.1SG.PL
         'I don't have sons.' [Nadezhda Kabaeva, p.c.]

The plurality of the subject in existential clauses (such as 3) is expressed by the plural suffix *-t* / *-ť*, whereas plurality in possessive clauses (such as 4) is indicated by the possessive suffix, which is attached to the possessee. This only applies when the possessor is one of the singular persons, as these persons have

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[6]However, the plural personal pronouns are ambiguous as to nominative and genitive case (for example, *śiń* is both 3PL.NOM and 3PL.GEN).

separate possessive suffixes for a singular and a plural possessee (such as *ćora-źä* son-POSS.1SG.SG 'my son'; *ćora-ńä* son-POSS.1SG.PL 'my sons'), as in (4a) and (4b), respectively. When the possessor is in the plural, the number of the subject is not explicitly marked in the possessive suffixes (such as *ćora-ńkä* son-POSS.1.PL.SG/PL 'our son; our sons'). (5) and (6) exemplify the latter instances of possessive clauses; in both clauses, the possessive suffix is ambiguous with regards to the number of the possessee and that number must be deduced from the context.

(5)   Da   śiń   pulə-snə-vək   **aš**.
      and 3PL.GEN tail-POSS.3PL.SG/PL-CLT NEG
      'And they do not have tails either.' [MokshEr-V.3/Moksha/2002/9]

(6)   Lomaťť, kaľi **ajaš** ťiń-gä   śeľmə-ńťä?
      person.PL Q   NEG 2PL.GEN-CLT eye-POSS.2PL.SG/PL
      'People, don't either of you have eyes?'
      [MokshEr-V.3/Mokshen_pravda/2004-9/28]

The main difference between the variants *aš* and *ajaš* is that only *aš* can be used in the past tense. Moreover, unlike the present tense in which *aš* is invariant, it is inflected in the past tense; *aš* acquires the suffix of the second past tense as well as the agreement marker of the plural subject (sg. *ašə-ľ* (NEG-PST.3SG); pl. *ašə-ɫť* (NEG-PST.3PL)). Examples of past tense existential and possessive clauses with a plural subject are presented in (7) and (8).

(7)   pakśa-sa **ašə-ɫť**   traktəʀ-t
      field-INE NEG-PST.3PL tractor-PL
      'there were no tractors in the field' [Nadezhda Kabaeva, p.c.]

(8)   moń   **ašə-ɫť**   ćora-ńä
      1SG.GEN NEG-PST.3PL son-POSS.1SG.PL
      'I didn't have sons.' [Nadezhda Kabaeva, p.c.]

It should be noted that the negative existentials *aš* and *ajaš* are remarkably different from their affirmative equivalent in terms of their inflectional properties. As was illustrated in Tables 2 and 3, as well as in examples (1) and (2), existential and possessive clauses in Moksha have an affirmative existential *uľi* that is actually the third person singular form of the verb *uľə-* 'be'. The affirmative existential agrees with the number of the subject. In the present tense, the regular verbal third person plural form *uľijťˀ* is used with a plural subject, whereas in the

past tense, the first past tense forms (sg.) *uľś*, and (pl.) *uľśť* are used – a tense form that is neither possible with a non-verbal predicate nor with the negative existential *aš*.

Finally, a special type of modal construction occurs where *aš* appears before an interrogative pronoun. These constructions denote the impossibility to perform certain actions. These actions are expressed by verbs that usually take the infinitive, as in (9).[7]

(9) **Aš** kosɑ,   **ɑš** məźɑrdɑ kńigɑ-ńä luvə-ms, […]
     NEG where.INE NEG when   book-DIM read-INF
     'There is no place and time to read a book.' (Lit. "There is no where, there is no when to read a book.") [MokshEr-V.3/Moksha/2002/16]

No detailed analysis has thus far been published on these constructions, but it seems that they should be regarded as a type of a functional extension of existential clauses. This is because they have affirmative equivalents that are formed with the regular existential predicate, the verb 'be', as in (10).

(10) T'äńi uľ-i   koda azə-ms: jumaɸksə-ńkä oćuftə-ɤť.
      now be-PRS.3SG how say-INF loss-POSS.1PL big.PL-PST.3PL
      'Now it is possible to say: Our losses were great.' (Lit. "Now there is how to say […]") [MokshEr-V.3/Moksha/2003-9-10/11]

5.3 Locative clauses

Moksha locative clauses require a locative phrase, as it is the predicate of the clause. The locative phrase acquires the endings of non-verbal predication, that is, the present or the second past tense as well as the marking of the subject person. The clause does not contain a copula or any other predicate item besides the locative phrase. Another feature that differentiates existential and locative expressions is that the subject of the locative clause is definite. This subject is either a personal pronoun or a noun with the definite nominative case suffix; nonetheless, the subject can be omitted because it is expressed in the personal ending of the locative predicate, as in (11):

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[7]It is important to emphasize that these are not cases of negative indefinite pronouns. The indefinite pronouns in Moksha are formed by attaching the suffix *-vək/-gək ~ -ga/-gä ~ -ka/-kä* to an interrogative pronoun. The resulting indefinite pronouns can be used either in an affirmative or a negative context (for example, *kosa* 'where': *kosəvək* 'somewhere, (not) anywhere, nowhere').

(11) Nona   ši-ťńəń   Mosku-sə-ľəń.
     previous day-GEN.DEF.PL Moscow-INE-PST.1SG
     'During the previous days I was in Moscow.'
     [MokshEr-V.3/Moksha/2002/19]

Negative clauses take either the particle *af* or the existential *aš*. When the particle *af* occurs, the predication is the same as in the affirmative equivalent: The conjugated locative phrase is the predicate of the clause, as in (12).

(12) Mäľaft-k,   ćora-j, af kud-s-at   / Ćebärńasta
     remember-IMP.2SG>3SG boy-VOC NEG house-INE-PRS.2SG   nicely
     pačkəťť!
     arrive.IMP.2SG
     'Remember, my son, you are not at home / Go [to the house] nicely!'
     [MokshEr-V.3/Varia/B/9]

Tables 2 and 3 present locative clauses that may also be negated by *aš*. The semantic difference between the functions of the ascriptive negator *af* and the existential negator *aš* is identical to what appears between the functions of ascriptive and existential negators in Erzya (see Hamari 2007: 91); the ascriptive *af* implies that the referent is not at the location expressed in the clause but somewhere else, whereas *aš* negates the existence of the referent in the location without the assumption that the referent might be somewhere else (Nadezhda Kabaeva, p.c.). The difference can be captured by comparing examples (12) and (13). In (12) (retrieved from a poem), the listener is asked to approach a house respectfully because he is not at his own home but at a house that belongs to someone else. As a consequence, *af* is used in negation. By contrast, the listener in example (13) is asked whether or not he is home; the listener responds with a negative answer without implying further as to his location. For this reason, *aš* appears.

(13) – Vańa, ton kud-s-at?   – **Aš-ɑn**   kud-sɑ,   –
       Vańa 2SG house-INE-PRS.2SG   NEG-PRS.1SG house-INE
     atvečɑ-ś   šä.
     answer-PST.3SG it
     '–Vańa, are you at home? – I am not at home, – he answered.'
     [MokshEr-V.3/Moksha/2002/32]

In addition to the semantic difference, locative clauses that are negated with *af* and *aš* also display a morphosyntactic difference. With the ascriptive negator *af,*

the locative phrase remains the non-verbal predicate, as the negative marker is an invariant particle. Nonetheless, the existential negator *aš* acquires the personal endings of the non-verbal conjugation in locative clauses – a property that this negator does not exhibit in existential clauses. As a consequence, *aš* could be regarded as the negative copula of the locative clause. The conjugations of *aš* in the present tense and in the second past tense are presented in Table 5 and I provide examples of the uses of the forms in (13) in the present tense and in (14) in the past tense, respectively.

Table 5: The non-verbal conjugation of *aš* in locative clauses.

	Present tense	**Past tense**
1sg	*ašan*	*ašəľəń*
2sg	*ašat*	*ašəľəť*
3sg	*aš*	*ašəľ*
1pl	*ašətama*	*ašəľəmä*
2pl	*ašətada*	*ašəľədä*
3pl	*ašət*	*ašəʟť*

(14)   Mon Mosku-sa   vesťə-vək **ašə-ľəń**.
       1sg   Moscow-ine once-clt neg-pst.1sg
       'I have never been to Moscow.' [MokshEr-V.3/Moksha/2003-11-12/10]

It is important to note that the conjugational properties of *aš* in locative clauses are non-verbal rather than verbal: In the present tense, the third person singular has no personal ending, whereas in the third person plural, the plural suffix of nouns (instead of verbs) occurs. Resembling non-verbal predicates, the second past tense is an unmarked tense in negative locative expressions, which means that it does not have the habitual or progressive meaning that it conveys in verbal clauses.

The longer variant *ajaš* is not used in locative clauses that occur in written texts and consequently, it does not have non-verbal conjugation. When used colloquially, however, *ajaš*, sometimes acquires the same personal suffixes as *aš* (Nadezhda Kabaeva, p.c.).

5.4 Negative pro-sentences

It is typologically common for negative existentials to become negative pro-sentences and to be used as general words for 'no' (Veselinova 2013: 127). In this

respect, the Moksha *aš* is no exception. However, as I established in Hamari (2007: 270–271), the invariant Moksha negative markers, *af* and *aš* (~ *ajaš*), are in complementary distribution as negative pro-sentences or one-word answers. The particle *af* is selected for present tense verbal clauses or ascriptive clauses, whereas *aš* (~ *ajaš*) is normally used in contexts related to the existential, possessive and locative clauses. In addition, the variant *aš* is used in verbal clauses of the first past tense.

To illustrate the distribution of *af* and *aš*, (15) and (16) are cited as examples of the *af* used as a one-word answer to questions or commands involving a verbal clause in the present tense. In (17), on the other hand, *af* is used in a context of an ascriptive clause.

(15) – Suva-k, požalsta, päľə-n! Adä! – **Af**, **af**,
enter-IMP.2SG please side-POSS.1SG come.on NEG NEG
suv-śə-ms aš məźarda, – atkaza-ś Koročkov.
enter-FREQ-INF NEG when refuse-PST.3SG Koročkov
'– Please, enter my place! Come on! – No, no, there is no time to enter, – Koročkov refused.' MokshEr-V.3/Moksha/2002/3]

(16) – S'kamə-t van-at? – **Af**, tosa taga uľ-ijť śťiŕ-ńa-t,
alone-2SG watch-PRS.2SG NEG there yet be-PRS.3PL girl-DIM-PL
śiń-gä van-ijť…
3PL-CLT watch-PRS.3PL
'– Are you watching [the calves] alone? – No, there are other girls; they are also watching.' [MokshEr-V.3/Varia/A/9]

(17) – Toń ťädä-ćä-vək, aľä-ćä-vək Käšalə-ńńə-t?
2SG.GEN mother-POSS.2SG-CLT father-POSS.2SG-CLT Käšal-GEN.EXT-PL

– **Af**.
NEG
'–Are your mother and father residents of Käšal? – No.'
[MokshEr-V.3/V.1/Moksha/Moksha/2003-5-6/23.txt]

The existential *aš* (~ *ajaš*) is in turn found in existential, possessive, and locative contexts (Hamari 2007: 270), as shown in (18), (19), and (20), respectively.

(18) – Aš mezevək, što-li? – **Ajaš**, ot'sä-j!
NEG anything Q-Q NEG uncle-VOC
'Isn't there anything? – No, my uncle!' [Hamari 2007: 270 < Paasonen & Ravila 1947: 888]

(19) Uľ-ijť   ľi ťiń   kodamәvәk prava-ńťä?   Śembә-ń ťiń
     be-PRS.3PL Q 2PL.GEN any.kind.of right-POSS.2PL all-GEN   2PL.GEN
     inksәnt   aťveč-an: **aš**.
     for.POSS.2PL answer-PRS.1SG NEG
     'Do you have rights of any kind? I shall answer for all of you: no.'
     [Hamari 2007: 270 < Mokša 1/1998: 126]

(20) "– maksim·-tsä   kut-sa?"   – "**ajaš**, **ajaš**, […]"
      Maksim-POSS.2SG house-INESS   NEG   NEG
     '– Is your Maksim at home? – No, no, […]' [Hamari 2007: 270 < Paasonen
     & Ravila 1947: 894]

Finally, (21) and (22) are examples of the invariant *aš* when it is used as a negative
one-word answer to questions in the first past tense.

(21) – Estәńbeŕä Pŕavijә-ń   ćentra-ś   lotka-ś   vano-mda
        since.then intelligent-GEN centre-NOM.DEF.SG stop-PST.3SG look-INF
     Moda-ť   meľgä? […]
     Earth-GEN.DEF.SG after

     – **Aš**, ašәź   lotka.
        NEG NEG.PST.3SG stop.CNG
     '– Since then, the Centre of intelligence stopped watching over the Earth?
     – No, it did not stop.' [MokshEr-V.3/Moksha/2002/26]

(22) – A toń   koj-sә-t,   meźәvәk iź   ľiśә?
        but 2SG.GEN way-INESS-POSS.2SG nothing   NEG.PST.3SG go.CNG

     – Moń   koj-sә-n,   **aš**, […]
        1SG.GEN way-INESS-POSS.1SG NEG
     '– But in your opinion, nothing happened? – In my opinion, no, […]'
     [MokshEr-V.3/Moksha/2003-5-6/23]

It is perfectly logical to use *aš* in answers to questions in which existential,
possessive or locative clauses appear (18–20), because *aš* is the regular negator
of these clause types. In contrast, the usage of *aš* in verbal clauses in the past
tense, such as (21–22), is not as logical because in verbal clauses, *aš* is always
conjugated according to the subject (and possibly object) person of the clause. A
possible explanation for this could be that the use of *aš* as a one-word answer
preceded the development of this marker into a negative auxiliary (Hamari 2007:
272–275). The invariant existential *aš* may have developed analogically to how

the one-word negation *af* was used as a short word for 'no'. After all, the use of the invariant *af* was restricted to the present and the second past tense as well as to certain moods. This may explain why speakers began to use the invariant *aš* elsewhere – including the first past tense where other option would have been a conjugated form of the negative auxiliary *iź-*. As argued in §7, the use of the invariant *aš* in one-word negations might be the key in understanding how the negative auxiliary *aš-* developed from the negative existential.

5.5 *Aš* as a noun

The variant *aš* (but not *ajaš*) can be used as a lexical noun in its basic form or with further derivation (Hamari 2007: 268–270). Without derivation, *aš* has meanings such as 'nothingness' or 'poverty'. It can also be inflected in different cases: In (23), *aš* is followed by the inessive case suffix. However, a more extensive study would be needed to clarify the extent of its inflectional potential.

(23)   […] kodɑmɑ   **aš-sɑ**   eŕä-ijť   lomɑttńä!
            what.kind.of poverty-INESS live-PRS.3PL person.NOM.DEF.PL
       'what poverty people live in!' [MokshEr-V.3/Moksha/2002/29]

The derivational suffixes that can be attached to *aš* are *-ši*, which is used for abstract nouns (*ašši* 'extreme poverty, need') and the diminutive suffix *-ńä* (*ašəńä* 'non-existence, smallness') (for example, MWb: 73). Furthermore, as observed by Bartens (1996: 79), *ašu* 'poor' is derived from *aš* with the derivational suffix *-u* of adjectives (24). This adjective is used as a base for further derivations, such as *ašuši* 'poverty' and *ašusta* 'poorly; in a poor way'.

(24)   […] **ašu** mokšə-ń   śemjä-stɑ   ćorɑ-ńä-ś   ɑrɑ-ś
            poor Moksha-GEN family-ELAT boy-DIM-NOM.DEF.SG become-PST.3SG
       sodɑ-f   pisɑťeľ-ks,   […]
       know-PST.PTCP author-TRA
       'the little boy from a poor Moksha family became a well-know author'
       [MokshEr-V.3/Moksha/2003-8/8]

Finally, the form *ašajka* 'not a thing, nothing' (MRV: 51) is also derived from *aš* (25); it has another diminutive suffix, *-(aj)ka*.

(25)   Čɑst-škɑ-dɑ   meľä moŕ-ť   tozɑ   i   muj-ɑt   – **ašajkɑ**.
       hour-CMPR-ABL after go-PST.2SG there.ILL and find-PRS.2SG   not.a.thing
       'After about an hour you went there and find – not a thing.'
       [MokshEr-V.3/Moksha/2003-11-12/3]

According to Bartens (1996: in passim), it is rather common for existentials to have nominal uses in the Uralic languages; negative existentials often convey meanings such as 'nothingness', 'smallness', and 'poverty', while affirmative existentials denote 'wealth', 'riches', and 'property'.

6 The past tense auxiliary *aš-*

6.1 Comparison of the existential *aš* and auxiliary *aš-*

The Moksha auxiliary *aš-* is synchronically separate from the negative existential *aš*, as they have different functions, semantics, and conjugational properties. The auxiliary *aš-* is used for the negation in verbal clauses in the first past tense. When *aš-* occurs in intransitive clauses as well as in transitive clauses with an indefinite object, it acquires the personal endings of the subjective conjugation. In other words, *aš-* agrees with the subject person and number as presented in Table 6. It can also take a personal ending of the objective conjugation in which case it additionally agrees with the definite object person and number (see the paradigms in Tables 9 and 10 of §6.2). The lexical verb of the negative construction in the past tense takes the connegative form. In Moksha, the connegative form is the stem of the verb.[8]

Table 6: The subjective conjugation of the first past tense negative forms of *mora-* 'sing'

1sg	*ašəń*	*mora*
2sg	*ašəť*	*mora*
3sg	*ašəź*	*mora*
1pl	*ašəmä*	*mora*
2pl	*ašəďä*	*mora*
3pl	*ašəśť*	*mora*

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[8]There is some alternation in the stem vowel of the connegative. If the stem ends in *-a* or the palatal allophone *-ə* of the reduced vowel the stem vowel is usually preserved (for example, *pala-* 'kiss': *ašəń pala* 'I did not kiss'; *peľə-* 'be afraid': *ašəń peľə* 'I was not afraid'). However, the stem-final *-ə* is sometimes omitted and the stem ends in a consonant (as in *ašəń peľ* 'I was not afraid'). On the other hand, when the stem vowel is the velar allophone *-ə̑* of the reduced vowel, it becomes *-a* (as in *udə̑-* 'sleep': *ašəń uda* 'I did not sleep'). Finally, if the stem ends in the passive-reflexive derivational suffix *-və-*, the vowel is omitted (for example, *atkazavə-* refuse, decline': *ašəń atkazav* 'I did not refuse').

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Examples (26) and (27) illustrate the use of the negative auxiliary *aš-* in the first past tense. In (26), the negative auxiliary takes the personal ending of the subjective conjugation, whereas (27) has the objective conjugation.

(26) Mes **ašəť**   kočkɑ   ľijä   ki?
      why NEG.PST.2SG choose.CNG another road
      'Why didn't you choose another road?'
      [MokshEr-V.3/Moksha/2003-5-6/23]

(27) Son **ašəďäź**   **kɑdɑ**!
      3SG NEG.PST.3SG>2PL leave.CNG
      'He did not leave you!' [MokshEr-V.3/Moksha/2005/33]

To summarize, the auxiliary *aš-* and existential *aš* exhibit the following clausal differences in negation: (1) The auxiliary *aš-* only appears in verbal clauses in connection with the connegative form of the lexical verb, whereas the use of the existential *aš* is restricted to existential, possessive, and locative non-verbal clauses in clausal negation; (2) The auxiliary *aš-* is only used in the past tense, whereas the existential *aš* expresses tense through its conjugation; (3) The auxiliary *aš-* is conjugated according to the past tense of either the subjective or the objective conjugation of verbs, whereas the existential *aš* is invariant in existential and possessive clauses in the present tense but acquires the suffixes of non-verbal predicates in the past tense as well as both present and past tenses of the locative clauses with definite subjects. Table 7 presents the functions and inflectional properties of the auxiliary and the existential in more detail.

6.2 A comparison of the auxiliaries *iź-* and *aš-*

Before discussing how the negative element *aš* received its new function, it is necessary to examine the relationship between the negative auxiliary *aš-* and its functional synonym, *iź-*. As was noted previously in this analysis, the auxiliary *iź-* must have had this function before *aš-*. Grammatical descriptions of Moksha generally consider these two auxiliaries synonymous and completely interchangeable. Nevertheless, to my knowledge, their relationship has not been examined in detail. If *aš-* were to compete or even gradually substitute *iź-* in past tense negative clauses, this would be reflected in their contemporary uses. In this section, I explore their relationship by analyzing the frequency of their occurrence in the MokshEr corpus.

The conjugational properties of the auxiliary *iź-* are identical to those of *aš-*. Similar to *aš-*, the auxiliary *iź-* is conjugated according to both subjective and

Table 7: A comparison of the Moksha negative existential *aš* and the auxiliary *aš-*.

	Aš in existential and possessive clauses	*Aš* in locative clauses	Auxiliary *aš-*
1. Clausal function			
	Negative predicate of existential and possessive clauses.	Negative copula of locative clauses.	Negative auxiliary of a verbal clause.
2. Tense			
Present tense	Invariant: no overt tense marking.	Present tense personal suffixes of verbs, except in third person forms.	Not used in the present tense.
Past tense	Second past tense only.	Second past tense only.	First past tense only.
3. Subject encoding			
Present tense	Invariant: no encoding of the subject person or number.	Subject person and number encoded by verbal suffixes, except in the third person forms.	Not used in present tense.
Past tense	Encoding of a plural subject.	Subject person and number encoded by verbal suffixes of the second past tense.	Subject person and number encoded by verbal suffixes of the first past tense.
4. Objective conjugation			
	No objective conjugation.	No objective conjugation.	Both subjective and objective conjugation (object person and number encoded by verbal suffixes).

objective conjugations and the personal endings are the same (see Tables 8–10). The connegative form of the lexical verb is also the same for both auxiliaries.

Both *aš-* and *iź-* appear in written contemporary Moksha in all personal forms of the subjective and objective conjugations. In addition, there are no differences as to the types of verbs they can occur with. Their interchangeability is further evidenced by the fact that both auxiliaries can be used within a single text and even within a single sentence, as in (28) and (29). In fact, as these types of sentences are rather frequent, this suggests that the alternation of the auxiliaries is at least partly determined by stylistic factors. In other words, the purpose of this alternation is to avoid repetition when several negative constructions occur.

(28) Da, viɖə-nc   azə-ms, käĺə-ń
     yes truth-GEN.POSS.3SG.SG tell-INF language-GEN
     šačə-ma-kasə-ma-sa   tuftaʟńä,   məźar-s
     be.born-NMLZ-grow-NMLZ-INESS reason.NOM.DEF.PL how.many-ILL
     kodamə-vək   učonajə-ńɖi lac-ŕäc   **ašəśť**   **sodav**,
     what.kind.of-CLT scholar-DAT well-in.order NEG.PST.3PL be.known.CNG
     iśť   **muv**.
     NEG.PST.3PL be.found.CNG
     'Yes, to tell the truth, the reasons of the evolution of language have so far not been well known, not been discovered by any scholar.'
     [MokshEr-V.3/Moksha/2003-x/1]

(29) No kɑrɑbəĺ-ś   **ašəź**   **kuʟcəndɑ**, **iź**   **šɑrkśńə** ɑf
     but vessel-NOM.DEF.SG NEG.PST.3SG obey.CNG   NEG.PST.3SG turn.CNG NEG
     śej,   ɑf tov.
     here.LAT NEG there.LAT
     'But the vessel didn't obey, didn't turn this way or that way.'
     [MokshEr-V.3/Moksha/2002/26]

The frequency of usage can also clarify the relationship of *aš-* and *iź-*. The fundamental assumption of the negative existential cycle is that in the intermediate stage B > C, the younger verbal negator that has developed from a negative existential gradually substitutes the older verbal negator. If we assume that there is competition between *aš-* and *iź-*, it should be possible to capture the current state of that competition by determining whether one is more common than the other in contemporary language.

Table 8: The subjective conjugation of *aš-* and *iź-* in the MokshEr corpus.

	aš-			*iź-*			Total
1SG	*ašəń*	175	82%	*iźəń*	39	18%	214
2SG	*ašəť*	43	88%	*iźəť*	6	12%	49
3SG	*ašəź*	734	44%	*iź*	921	56%	1 655
1PL	*ašəmä*	29	76%	*iźəmä*	9	24%	38
2PL	*ašəďä*	10	100%	*iźəďä*	0	0%	10
3PL	*ašəśť*	202	45%	*iśť*	244	55%	446
							2 412

Table 8 summarizes the frequency of occurrence of *aš-* and *iź-* in the subjective conjugation in the MokshEr corpus. The table provides the number as well as the percentage of occurrence of each personal form. As can be seen, the auxiliary *aš-* most commonly occurs with first and second person subjects, whereas *iź-* is slightly more common with third person subjects. As a tentative hypothesis, it could therefore be proposed that the younger auxiliary *aš-* has substituted the original *iź-* in non-third person forms faster than in third person forms. A possible explanation for this is that the third person forms are more frequent than the others and may have resisted the change more persistently. After all, past tense auxiliaries occur most often when the subject is in the third person, with the singular being more frequent than the plural. The number of occurrences of *aš-* is not far behind *iź-* even in the third person forms, as *aš-* appears in almost half of all the constructions.

Indeed it can be argued that the number of the non-third person forms in this corpus is rather small and interpretations must therefore be made cautiously. This need for caution is even more essential when analyzing the relationship of *aš-* and *iź-* from the perspective of the objective conjugation. Table 9 presents the data of the past tense auxiliaries that occur with an object in the singular and Table 10 for those with a plural object. As the data are extremely scarce, the frequency of occurrences is displayed in terms of their number, not in percentages. As demonstrated by the data, the frequency of all forms of the objective conjugation is extremely low, except for the forms of the singular third person objects. Even so, there is a clear tendency for *aš-* to be more common than *iź-* throughout the paradigm. The only exception is the form with a third person plural subject and a first person plural object. This ratio, nonetheless, can be regarded as being

Table 9: Objective conjugations of *aš-* vs. *iź-* in the MokshEr corpus (singular object).

| O → | 1SG | | | | 2SG | | | | 3SG | | | |
S ↓	*aš-*		*iź-*		*aš-*		*iź-*		*aš-*		*iź-*	
1SG	–		–		*ašiɟťəń*	1	*iźiɟťəń*	0	*ašińä*	74	*iźińä*	5
2SG	*ašəmajť*	3	*iźəmajť*	0	–		–		*ašiť*	35	*iźiť*	0
3SG	*ašəmań*	8	*iźəmań*	1	*ašəńźä*	0	*iźəńźä*	0	*ašəžä* ~ *ašəź*	242 4	*iźəžä*	11
1PL	–		–		*ašəďäź*	1	*iźəďäź*	0	*aš əśk*	25	*iźəśk*	3
2PL	*ašəmaśť*	1	*iźəmaśť*	0	–		–		*ašəśť*	5	*iźəśť*	0
3PL	*ašəmaź*	6	*iźəmaź*	1	*ašəďäź*	1	*iźəďäź*	0	*ašəź*	66	*iźəź*	4

Table 10: Objective conjugations of *aš-* vs. *iź-* in the MokshEr corpus (plural object).

| O → | 1PL | | | | 2PL | | | | 3PL | | | |
S ↓	*aš-*		*iź-*		*aš-*		*iź-*		*aš-*		*iź-*	
1SG	–		–		*ašəďäź*	0	*iźəďäź*	0	*ašińä*	8	*iźińä*	1
2SG	*ašəmaśť*	1	*iźəmaśť*	0	–		–		*ašiť*	0	*iźiť*	0
3SG	*ašəmaź*	1	*iźəmaź*	1	*ašəďäź*	1	*iźəďäź*	0	*ašəźəń*	33	*iźəźəń*	2
1PL	–		–		*ašəďäź*	0	*iźəďäź*	0	*ašəśk*	2	*iźəśk*	0
2PL	*ašəmaśť*	0	*iźəmaśť*	0	–		–		*ašəśť*	4	*iźəśť*	0
3PL	*ašəmaź*	0	*iźəmaź*	1	*ašəďäź*	1	*iźəďäź*	0	*ašəź*	40	*iźəź*	0

unreliable, as only one example of *iź-* and no examples of *aš-* were discovered in this category.[9]

The frequencies of occurrence suggests there is in fact competition between the negative auxiliaries *aš-* and *iź-*. Even though the auxiliaries can be used interchangeably in the same contexts, *aš-* seems to be selected more often than *iź-*. This could indicate that a gradual substitution of the older auxiliary by the newer one – based on the negative existential – is in progress.

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[9]Note also that in the case of *aš-*, there are two possible endings for 3SG>3SG – one that is in accordance with the same form of *iź-* and another in which the final vowel has been dropped, making the form identical to that of 3PL>3SG and 3PL>3PL. (See Trosterud (1994) and Keresztes (1999) for more details on the objective conjugation in the Mordvin languages.)

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7 The development of Moksha *aš* and *aš-*

7.1 The negative existential *aš*

I mentioned in the introduction that the origin of the Moksha *aš* is uncertain. The same applies to the negative existential *araś* that occurs in the closest sister language, Erzya. The etymology of these two negative markers has been discussed in detail in earlier literature (see Hamari 2007: 107–113, 2013: 477–479), which is why I provide only a short summary on the development of the Moksha *aš ~ ajaš*. As I observed previously, the Moksha *aš ~ ajaš* and the Erzya *araś* most likely do not share an etymological connection. This means that both existentials have probably developed after the split of Proto-Mordvin. There is also no positive evidence of an earlier negative existential in the protolanguage. Regarding the origin of the Moksha *aš ~ ajaš*, two hypotheses have been proposed:

1) According to Klemm (1934: 388), *aš* could have originated from a combination of the negative particle in **a* and the Moksha verb *ašč:ə- ~ aš:ə-* 'be, be situated' (~ Erzya *ašťe-* 'id.') that originally would have taken the connegative suffix in **-k* (**a-ašč:ə-k > *ašk > aš*). The longer variant *ajaš* developed from a form in which /j/ was introduced to prevent hiatus (**a-j-aš > ajaš*).

2) According to Bartens (1996: 79), *aš* could have originally been a noun with meanings such as 'non-existence' or 'poverty'. Bartens elaborates that the variant *ajaš* could have an emphasizing prefix *aj-*, which is also sometimes added to the negative particle *af* (> *ajaf*).

Klemm's assumption would fit the outline of the negative existential cycle proposed by Croft (1991), but its etymological explanation is questionable. The negative particle *a* and its variant *aj* that occurs in the front of a verb with a word-initial vowel are only attested in Erzya, while the Moksha equivalent of the Erzya *a* is *af*. In other words, I am more inclined to agree with Bartens, although the noun *aš* 'non-existence; poverty' also lacks etymology. Nonetheless, considering the non-verbal conjugation and the use of *aš* as a noun, it is justified to assume that *aš* was not originally a verb but a nominal item.

7.2 The negative auxiliary *aš-*

Theories on the origin of the Moksha past tense auxiliary *aš-* have always taken into account its relationship to the negative existential *aš*. The traditional view (originally presented by Szinnyei 1884: 148) is that the auxiliary developed when verbal conjugation was introduced to the negative existential marker. However,

there are both semantic and functional problems with the assumption that a negative marker used primarily with the existential present tense would begin to be used as a past tense negative auxiliary in verbal predicates without acquiring other functions as a negator of verbal clauses. In Hamari (2007: 275; 2013: 480), I argue that the auxiliary *aš-* may actually have originated as a combination of the existential *aš* and the older negative auxiliary *iź-*. Thus, the development of the auxiliary *aš-* would represent an instance of the negative existential cycle where the negative existential begins to be used in verbal negation as a reinforcement for the regular verbal negator (cf. Croft 1991: 10–11).

It has been suggested that the negative existential marker *aš* could have originally been attached to the older negative auxiliary *iź-* for emphasis (as in 1SG **aš + iźəń > *ašəźəń*[10], 2SG **aš + iźəť > *ašəźəť* etc.) (Hamari 2007: 273–275, 2013: 479–480). As the construction lost its emphatic force, it was analogically adapted to the conjugation of the auxiliary *iź-* by dropping the element *-əź-* (for example, 1SG **ašəźəń > *ašəń*, 2SG **ašəźəť > ašəť*). The element *-əź-* has nonetheless been preserved in the first and second person forms of the subjective conjugation in the dialect of the Kovylkino district; Ščemerova (1972: 178) observes that this dialect has forms containing the element *-əź-* which is absent from other dialects (Kovylkino: 1SG *ašəźəń* 'I did not', 2SG *ašəźəť* 'you did not'). These dialectal forms could be regarded as transparent relics of the fusion of the existential and the original past tense negative auxiliary.

Another important point is that although the first and second person forms as well as the third person plural form of the auxiliary *aš-* are the regular first past tense forms of lexical verbs (such as cf. 1SG PST *pala-ń* 'I kissed' ~ *ašə-ń* 'I did not'), the third person singular is irregular (cf. 3SG *pala-ś* '(s)he kissed' ~ *ašə-ź* '(s)he did not'). As the only verb that has a voiced palatalized sibilant as a third person singular marker is the negative auxiliary *iź-* (3SG *iź* '(s)he did not'), it can be argued that the fusion of the original existential and the auxiliary continues to be visible in the singular third- person form of the subjective conjugation of the auxiliary *aš-* (3SG *ašəź < * aš + iź*).

One question still remains: what were the circumstances that led to the agglutination of existential *aš* and the past tense negative auxiliary *iź-*? There are no traces of *aš* functioning to emphasize negation which, in my opinion, means that we could search for answers in the context of *aš* in the past tense meaning, that is, as a pro-sentence.

As discussed in §5.4, the Moksha invariant *aš* is used as a pro-sentence, as a one-word answer to a question when it contains a clause that is existential, pos-

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[10]In Moksha, vowels other than *a* and *ä* are generally reduced in non-initial syllables and this means that the change *i > ə* in the construction is fully plausible.

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sessive or locative, but also when the question has a verbal predicate in the first past tense. This clause-initial position (30a) could have offered a possibility for an agglutination of the invariant *aš* and a following past tense auxiliary (30b), accompanied by the reduction of the vowel *i* in an unstressed position. The next step in this development would have been the agglutinated auxiliary form **aš-əź* adjusting to the conjugation of the older auxiliary *iź-*, and the disappearance of the element *-əź-* (30c). A final observation is that the invariant *aš* could also appear as a one-word answer with the new negative auxiliary *aš-* (30d). It is important to note that steps (30a), (30c), and (30d) are still possible in contemporary Moksha and even (30b) is possible in the Kovylkino dialect.

(30) Question:

– mora-t̓   aľi aš?
    sing-PST.2SG or NEG

'Did you sing or not?'

Answer:

a. – aš, iźəń   mora.
        NEG NEG.PST.1SG sing.CNG

    'No, I did not sing.'

    >

b. – aš-əźəń   mora
        NEG-NEG.PST.1SG sing.CNG

    'I did not sing.'

    >

c. – ašəń   mora.
        NEG.PST.1SG sing.CNG

    'I did not sing.'

    >

d. – *aš*, ašəń   mora.
        NEG NEG.PST.1SG sing.CNG

    'No, I did not sing.'

Veselinova (2013: 127–133) observes that the process of negative existentials developing into a pro-sentence and then into a standard negator has also been observed in other languages.

7.3 Discussion

Moksha could be regarded as a language in Stage B of the negative existential cycle proposed by in Croft (1991) because it has separate negative markers for verbal negation and for the negation of existential clauses. According to Croft, the negative existential marker may be found to function in ways that previously were characteristic of some other negative markers. Thus, the negative existential begins to be used even in the negation of verbal clauses, and in time, this existential displaces the original negative marker of verbal clauses. When this type of displacement occurs, the negative existential becomes the only negative marker for verbal and existential clauses, and thus the cycle reaches the third stage, stage C. Croft's hypothesis is that the transition from stage B to C can proceed in the following ways:

1) "the negative existential may compete with the ordinary verbal negator, sometimes being used instead of it"

2) "the negative existential can reinforce the (presumably older) regular verbal negator"

3) "[there is] only gradual substitution of the negative existential for the verbal negator in only part of the verbal grammatical system"

   (Croft 1991: 9–11)

The Moksha negative existential is not necessarily the result of an older negative marker of verbal clauses fusing with a positive existential, but the negative existential could also originally be a noun. Yet the further development of the negative existential displays characteristics of the cyclic development described by Croft, as the existential has penetrated the sphere of verbal negation by becoming a negative auxiliary of past tense verbal predicates. All in all, there are evident traces of all three means that Croft described. Thus, due to the use of the Moksha negative existential as a pro-sentence, the existential became used to possibly reinforce the older verbal negator (2) and subsequently a new verbal negator arose. The new negator that was based on the existential began competing with the ordinary negator and became the most frequently chosen option (1). Finally, the new negator has not supplanted the entire negation system, but this form is only used in one part of the verbal grammatical system (3): to negate past tense verbs.

Etymological evidence suggests that the time span of the evolution of the Moksha negative existential and its development into a negative auxiliary spans approximately one thousand years. As there is no cognate for the Moksha negative

existential in the closest sister language, Erzya or in any other Uralic language, this negative existential cannot be dated beyond the division of Proto-Mordvin that began around the eighth century.

8 Conclusions

I have demonstrated that *aš* occurs in many negative constructions of Moksha and has varied inflectional properties in different clausal functions. It is invariant as a negative pro-sentence, and it is likewise invariant in present tense existential and possessive clauses, with the exception of taking the second past tense marker when necessary. In locative clauses *aš* is conjugated in the present and the second past tenses. As a noun, *aš* is subject to derivation and case inflection and finally, as a past tense negative auxiliary, *aš-* is exclusively conjugated in the first past tense and used only in verbal clauses.

There are many possible reasons for the negative existential *aš* developing different functions. It may have originally been a noun meaning 'non-existence; poverty' and acquired personal suffixes in the predicate position of non-verbal clauses, such as in existential and possessive expressions. It also became an invariant negative pro-sentence in contexts where the other one-word negator *af* could not appear. In this clause-initial position, *aš* may have agglutinated into the earlier negative auxiliary *iź-* and created its own past tense personal conjugation. Consequently, both *aš-* and *iź-* are used as past tense negative auxiliaries in contemporary Moksha. The higher frequency of *aš-* may indicate that it is gradually replacing the original auxiliary.

Finally, *aš* has a longer invariant form *ajaš* which is only found in present tense existential and possessive clauses as well as a negative word for 'no'. Similarly, the particle *af* has the variant *ajaf*, which suggests the prefix *aj-* was originally most probably an emphasizing element.

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Acknowledgements

ISO codes

Erzya: myv   Moksha: mdf

Abbreviations

1	first person	IMP	imperative mood
2	secont person	INESS	inessive case
3	third person	INF	infinitive
ABL	ablative case	LAT	lative case
CLT	clitic	NEG	negative
CNG	connegative	NMLZ	nominalizer
CMPR	comparative case	NOM	nominative case
COND	conditional mood	OPT	optative mood
CONJ	conjuctive	PL	plural
DEF	definite	POSS	possessive suffix
DES	desiderative mood	PRS	present
DIM	diminutive	PST	past
ELAT	elative case	PTCP	participle
EXT	extension	Q	question marker
FREQ	frequentative	SG	singular
GEN	genitive	TRA	translative
ILL	illative case	VOC	vocative

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