

# Mokša Mordvin verbal negation described and compared with other Uralo-Altai languages

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## Abstract

Some languages use a single unit to express verbal negation, like *not/n't* in English. Some others have several units according to the moods and tenses of the verb. This is the case for the Uralic Mokša-Mordvin language. This feature can be even used for descriptive purposes to determine the moods and tenses of this language and this approach makes it apparent that the traditional descriptions of Mokša cannot be accepted without some reservations. The first part focuses on the description of verbal negative forms in Mokša. Once properly described, Mokša-Mordvin is compared with other languages of northern Eurasia, mostly of the Uralo-Altai type, in the second part.

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## 1 Introduction

In the languages spoken in Europe, verbal negation is generally expressed with a particular unit, which has a fairly stable and unique segmental expression: English *not*, German *nicht*, Italian *non*, Basque *az*, etc. Basque, even though it is not an Indo-European language, is no exception to this areal tendency. In French, the situation is slightly more complex as the negative load of *ne*, inherited from Latin, has been gradually transferred to other words: *pas*, *point*, *mie*, *goutte* among others, which were originally nouns. But in modern spoken French, the practical situation is that the negative load is entirely conveyed by *pas*. The other items are either obsolete, archaic or marked as dialectal and *ne* is most often disposed of in informal speech. In English, *not* has an unstressed variant *n't*, but the point in discussion here is that the expression of verbal negation has a segmental expression, which is insensitive to the verbs negated and the moods and tenses. It is suffixed to auxiliaries which are sensitive to moods and tenses, like *do* or *did*, but it is stable: either *not* or its unstressed variant *n't* is used. One may

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expect that this apparently logical and economic situation should be the same in most if not all languages. It is a universal that all languages permit the expression of absence or negation, but it is *not* a universal that this is always performed with a single and stable unit. Some languages, with many speakers such as Chinese Mandarin, actually have several segmental units for verbal negation. Mokša-Mordvin is a less famous instance but conspicuous for having a rather large set of them. In this Uralic language spoken in western Russia on the south-western bank of the Volga, negation tends to receive a specific expression in each of the verbal moods, if not tenses, to such an extent that these variations can contribute to determine how many moods and tenses this language actually has.

The article aims at describing the Mokšan verbal system according to that particular criterion. It will be shown that the traditional descriptions are not fully satisfactory from this point of view. Moreover, it is interesting to analyze Mokša in a comparative and typological perspective with other Uralo-Altaic languages, perceived here as a kind of areal and typological Sprachbund rather than a valid genetic node, and with other Mordvin languages or dialects, especially Erzya to begin with.

## 2 The Indicative Mood

The Indicative mood in Mokša has three tenses: Present, Past and Continuous Past. They are respectively called Present (тяниень пингсь /tɛnɪjɛn piŋs/<sup>1</sup>), First Past (васенце ётай пингсь /vasɛntse jɔtɔj piŋs/), Second Past (омбоце ётай пингсь /ombɔtse jɔtɔj piŋs/) in Aliamkin (2000: 127) and Zaicz (1998: 198)<sup>2</sup>. It can be noted that Ahlquist (1861) does not mention the Continuous Past, which unfortunately tends to show that this first and oldest description of Mokša cannot be fully trusted in spite of numerous qualities. Zaicz (1998: 200) also inadequately claims that the Continuous Past does not exist in Mokša: “The second past tense, which is lacking in Moksha, refers to events in the past, which either lasted long or habitually recurred.” It can be added a periphrastic Future to these tenses. As in many languages, Present can be used to express future actions, as noted by Ahlquist (1861: 45): “das Präsens [vertritt] in dieser Mundart auch das Futurum”<sup>3</sup> or Zaicz (1998: 199): “The present tense could more properly be termed a non past, as it often refers to the future.” This tense is called the Simple Future (простой сай пингсь /prɔstɔj saj piŋs/) in Aliamkin (2000: 128). The periphrastic Future is called Compound Future (сложной сай пингсь /slɔznɔj saj piŋs/). It is unclear to which extent this periphrastic Future is really a native feature of Mokša or if it is an equivalent or décalque of the Russian Future patterned as *быть* [bitʲ] + *Verb*. Periphrastic constructions with other verbs can convey a semantic Future load, such as *arsems* ‘to think of, to plan to’ but they are not grammaticalized.

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<sup>1</sup> The transcription used in the article is phonemic and therefore does not indicate the palatalization of consonants in contact with front vowels, as it usually happens in the south-eastern idiolects or dialects: /jakalen/= [jakal'enʲ].

<sup>2</sup> Zaicz (1998) is in fact a description of Erzya, even though it is misleadingly titled “Mordva”. In spite of this intrinsic potential limitation, features assigned to Erzya are often acceptable for Mokša as well, even if they cannot be deduced from the actual contents of Zaicz’s article and need cross-references, which can be found for example in Aliamkin (2000).

<sup>3</sup> « in this dialect the Present expresses the Future as well ».

The negation of the Indicative tenses is /af/ <aф>, except for the Past, and it normally appears right before the verb. Paradigms will be illustrated with the verb /jaka/ <яка> ‘to walk’: /jakan/ <якан> ‘I walk, am walking’ → /af jakan/ <aф якан>.

- (1) /af/ /jaka-n/  
 NEG walk-1.SG  
 ‘I don’t walk, I’m not walking’

As is often the case the Present is not expressed by an explicit segment in Mokša. Some authors cite other possibilities for the negation of the Indicative Present. Ahlquist (1861: 50-51), the first description explicitly focusing on Mokša alone, has forms like *aš'in jaka* ‘I do not walk’ with /aš/ <аш> ‘there is not’. One problem is that it cannot be found in any present-day book or dictionary of Mokša. For that matter it seems dubious. It was at the very best a dialectal obsolescent feature of the northern Mokšan dialect surveyed by Ahlquist in the middle of the XIXth century, but I tend to think that this is just erroneous for the Present tense. Paasonen (1903: 22) cites a Mokšan form: <ašən' p'el<sup>L</sup>t'> ‘I was not afraid’ and Aliamkin (2000: 148) indeed indicates that /aš/ can be used as a synonym of /iz/ for negative Past verbal forms but cites only examples in the Medio-Potential voice. Rédei (1988: 68) lists all negative segments attested in Uralic languages and mentions /aš-/ only for the Past. Another possibility, which appears only for the Past, is /iz/ or /iz/<sup>4</sup> <изь>. This is described in Aliamkin (2000: 148) and the Mokšan-Russian dictionary edited by Serebrennikov (1998: 202) lists that possibility: /izen jaka/ <изень яка> ‘я не ходил’. Another (shorter) dictionary: Herrala-Feoktistov (1998) does not list this unit at all. In the literary Mokšan language, it seems that <изь> is restricted to the negation of the Medio-Potential voice as will be described below.

The Erzyan equivalent of the above Mokšan negative sentences is (Zaicz 1998: 198): Erzya: /kundan/ <кундан> ‘I catch, am catching’ → /a kundan/ <a кундан>:

- (2) /a/ /kunda-n/  
 NEG hunt-1.SG  
 ‘I don’t hunt, I’m not hunting’

Erzya still has a short negative segment /a/ for which there is no equivalent in modern Mokša. In the list of words and translations collected by Witsen (1692), there may be an instance of this short negation /a/ in <amidu> glossed in Dutch <leeft> ‘alive’. This can be analyzed as a negative past participle ‘un-die-d’ = <a-mid-u>. Another instance is <ayrista> glossed <zyn nuchteren> ‘to be sober’, which may stand for <a-ired-sta> ‘un-drunken’. The “Mordvinen” of Witsen (1692) are well-known to be Mokšans<sup>5</sup>. It would therefore appear that Mokša lost the short /a/ at a rather recent time and now only has the long form /af/. On account of /apak/, /af/ is probably to be analyzed as coming from /a/ + /-p(pa)/ with no final vowel.

<sup>4</sup> Written <ez> in Ahlquist (1868: 50-51) or <ez, əz> in Paasonen (1903: 22). None of these authors has a stable and coherent notation of [i].

<sup>5</sup> See Fournet (2008) for an extensive analysis of Witsen's data, graphic conventions and modern comparanda.

The Compound Future is built with the verb, acting as auxiliary, /karma/ <карма> ‘to begin’ in Present together with one of the so-called Infinitive forms /jakama/: /karma-n jakama/ <карман якама> ‘I’ll walk’<sup>6</sup> → /af karma-n jakama/ <аф карма-н якама>:

- (3) /af/ /karma-n/ /jaka-ma/  
 NEG AUX.FUT-1.SG walk-INF  
 ‘I will not be walking’

The Continuous Past is more complex and two ways to express negation exist for this tense. The suffixes of the Continuous Past /-(ə)le/ and of the suffix for the first person singular (1.SG) /-(e)n/ can be added either to the verb /jaka/ or to the negative segment /af/. The second possibility appears to be statistically the most frequent and probably the most acceptable: (1) /jakalen/ <якалень> ‘I was walking’ → /af jakalen/ <аф якалень> or (2) /jakalen/ <якалень> ‘I was walking’ → /afəlen jaka/ <афəлень яка>:

- (4) /af-əle-n/ /jaka/  
 NEG-CONT.PST-1.SG walk  
 ‘I was not walking’

The different pronominal suffixes of the Indicative in Mokša can be described as follows:

	1.SG	2.SG	3.SG	1.PL	2.PL	3.PL
Present	-n	-t	-j	-t-ama	-t-ada	-çt < *jht
Continuous Past	-(ə)le-n	-(ə)le-t	-s	-(ə)le-me	-(ə)le-de	-(j)st
Past	-jn	-jt	-s	-(e)me	-(e)de	-(j)st

Table 1. Personal suffixes for Affirmative Indicative mood in Mokša

The whole set of forms for the Indicative is: Present, (/af/) /jakan/, /jakat/, /jakaj/, /jakatama/, /jakatada/, /jakaçt/<sup>7</sup>; the Continuous Past has two sets of forms: either (/af/) /jakalen/, /jakalet/, /jakaleme/, /jakalede/; or more frequently /afəlen/, /afəlet/, /afəleme/, /afəlede/ followed with the bare stem /jaka/.

A peculiarity of Mokša among Uralic languages which is also a difference with Erzya is that it nearly does not have any trace of vowel harmony and that suffixes have a very limited allomorphic variation: *tama* ~ *tjama* for 1.PL and *tada* ~ *tjada* for 2.PL are the most conspicuous and rare examples of suffixal allomorphy.

3.SG and 3.PL forms are syncretic for Continuous Past and Past. These suffixes cannot be added to the negative segment /af/: /jakas/ <якась> ‘he, she, it (has) walked’ but \*\*/afs jaka/ is

<sup>6</sup> Cf. Zaicz (1998: 199) for a similar construction in Erzya.

<sup>7</sup> This is written <якайхть> /jakajxt/ or /jakajçt/ in literary Mokša. This etymological orthography is still reflected in phonetically conservative dialects and was recorded by Ahlquist (1861: 46) and Witsen (1692).

impossible<sup>8</sup>. The same impossibility is true for *\*\*/afst jaka/*. The whole set of forms for Past is: */jakajn/, /jakajt/, /jakas/, /jakame/, /jakade/, /jaka(j)st/*, and in the negative with *аш* : */afən/, /afət/, /afəz/, /afəme/, /afəde/, /afəst/* followed by the verb root */jaka/*, or with *изь* : */izen/, /izet/, /iz/, /izeme/, /izede/, /ist/* followed by the verb root */jaka/*. The form 3.SG */iz/* is unsuffixed but 3.PL gets the regular *-t* of nominal plural and */iz/* is regularly devoiced into */ist/*.

- (5) */iz-en/*                      */jaka/*  
 NEG.PST-1.SG.PST              walk  
 ‘I did not walk’

Erzya has similar forms but resorts only to *эзь /ez/*: */kundin/* <кундинь> ‘I caught’ → */ez-in kunda/* <эзинь кунда>. It can be noted that similar suffixation of the pronouns to the negative segment instead of the verb exists in Finnish: *kävele-n* ‘I walk’ → *e-n kävele* ‘I do not walk’, but not in Hungarian *gyalogolom* → *nem gyalogolom*. This is not infrequently described as Finnish having a “negative verb”. Mokša goes one step farther than Finnish as the Past tense marker cannot be suffixed to the negative segment in Finnish, contrary to what happens in Mokša: *ot-a-n* ‘I take’ → *e-n ota* and *ot-i-n* ‘I took’ → *e-n otta-nut*. In Finnish *e-n* ‘I not’ is in fact tense insensitive. It can be noted that the dictionaries of Mokša, listed in the references of the paper, deal with */af/* as a particle (частица), not a verb. The Finnish negation should not be considered a verb in my opinion. From a strictly formal point of view, the pronominal suffixes are moved from the verb to the negative segment *e-*, but this formal contingency does not transform it into a verb. This issue is controversial in Uralistics. Zaicz (1998: 199) considers this particle to be a verb: “this particle probably descends from the base of the pFU<sup>9</sup> negative verb *\*e- ~ \*ä-* (with metaphony *\*e/ä > \*a* in *\*e-wole >> avol’* ‘isn’t’).”<sup>10</sup> Rédei (1988: 69) refuses to posit a negative verb at the Proto-Uralic stage: “[P]U *\*e* war ursprünglich - weil einsilbig - sicher kein Begriffswort, d. h. kein Verb für ‘nicht sein’, sondern eine Verneinungspartikel, die später zu einem Verb wurde, d. h. sie nahm die Endungen des Grundverbs auf: Ableitungssuffixe (vgl. *elä, älä*), Zeichen und Konjugationsendungen.”<sup>11</sup> But that this word had only one syllable is actually not a conclusive reason to think it was not a verb.

### 3 The Optative and Imperative Moods

The negation of the Imperative is not */af/* <аф> but */tja/* <тя>: */jakak/* <якак> ‘walk!’ → */tjat jaka/* <тят яка> ‘don’t walk (2.SG)’<sup>12</sup> and */jakada/* <якада> ‘walk!’ → */tjada jaka/* <тяда яка> ‘don’t walk (2.PL)’. The same negative segment is also used for the Optative, expressed by the suffix *-za-* : */ulezan/* <улезан> ‘May I be!’ → */tjazan ule/* ‘May I not be!’.

<sup>8</sup> In connection with this impossibility, it will be suggested below in the article that */iz/* probably comes from *\*a-j-š-*.

<sup>9</sup> Proto-Finno-Ugrian.

<sup>10</sup> Erzya *avolj* ‘is not’ should be confused with Mokša *afəl* ‘was not’. *Avolj* < *\*aw* ‘not’ + (*w*)*ole* ‘to be’ but *afəl* < *ap(a)* ‘not’ + *əl* ‘Continuous Past’.

<sup>11</sup> “[Proto-]Uralic *\*e* was originally - because it is monosyllabic - certainly not a lexical item, that is to say it was not a verb ‘to be not’, but a negative particle, which later on became a verb, that is to say it received the same endings as the verbs: derivational suffixes (compare with *elä, älä*), moods and tense suffixes.”

<sup>12</sup> */tjak/* also exists. 2.SG is often expressed with *-k* and not *-t* in Erzya and Mokša. This issue would require a specific analysis.

(6) /tja-t/            /jaka/  
 NEG-2.SG        walk  
 ‘don't walk’

(7) /tja-za-n/        /ule/  
 NEG-OPT-1.SG be  
 ‘May I not be!’

Note that the segments *-za-* Optative and *-n* 1.SG are suffixed to the negative segment *tja*. The semantic features of the Imperative, which expresses order or interdiction, and those of the Optative, which expresses hope or fear, probably account for the same negation being used for both. That the Indicative and the Imperative differ as regards negation is not at all rare in Uralic languages:

- Finnish *mene-t* ‘you (2.SG) go’ → *e-t mene* ‘you (2.SG) don't go’ ~ *älä mene!* ‘don't go!’
- Hungarian *mész* ‘you (2.SG) go’ → *nem mész* ‘you (2.SG) don't go’ ~ *ne menj!* ‘don't go!’
- Vogul Sosva *šalte-n* ‘you (2.SG) enter’ → *at šalte-n* ‘you (2.SG) don't enter’ ~ *ul šalte-n!* ‘don't enter!’

Authors disagree about the paradigm of the Optative in Mokša. Some describe a partial paradigm, as in Aliamkin (2000: 135) for example, others a complete one, as in Ahlquist (1861: 53). In theory the set of forms resulting from the maximal potential combination of suffixes can be: /ulezan/, /ulezat/, /uleza/, /ulezama/, /ulezada/, /ulest/ and the negative paradigm is: /tjazan/, /tjazat/, /tjaza/, /tjazama/, /tjazada/, /tjast/ followed with /ule/. Imperative and Optative moods only have Present tense.

It seems quite logical and acceptable<sup>13</sup> to compare Mokša *tja* with Vogul *at*, but it can be noted that Mokša has no trace of the other negative segment represented by Finnish *älä* and Vogul *ul*. The other Mordvin language, Erzya, nevertheless has *ilja mora* ‘do not sing’ (Zaicz 1998: 202). This negative segment *ilja* is also used for the Optative mood in Erzya: *mora-za-n* ‘let me sing’ > *ilja-n mora* ‘let me not sing’ (Zaicz 1998: 201). It seems that Proto-Mordvin inherited both negative segments *\*ilja* (Imperative) and *\*(a)tja* (Optative) and that each Mordvin language divergently generalized one form for both moods.

#### 4 The Subjunctive(-Conditional) Mood

The Subjunctive mood (Сослагательной /saslagatelnoj/ in Aliamkin 2000: 132) is nearly identical to the Continuous Past as regards its formation, but for 3.SG and 3.PL: /jakalen/, /jakalet/, /jakal/, /jakaleme/, /jakalede/, /jakaŋt/. The risk of confusion may explain why the Continuous Past forms for 3.SG and 3.PL should not be *\*\*/jakal/* and *\*\*/jakaŋt/*, but instead are syncretic with the Past. The negative segment for the Subjunctive is /af/ <aϕ> with suffixation

<sup>13</sup> Another instance of lost initial (unstressed) vowels is Mokša /id/ > /(i)djaka/ ‘child’. Cf. Paasonen (1903: 10) and Serebrennikov (1998: 171, 200).

of pronouns onto it: /afəlen/, /afəlet/, /afəl/, /afəleme/, /afəlede/, /afəlt/ /jaka/. Semantically, this mood describes actions not yet actualized: possible, impossible, hypothetical, desired or future actions. It covers much more than the Subjunctive of Romance languages and corresponds to the addition of the Subjunctive, the Conditional and modal uses of the Future, combined together in one form. For example :

- (8) /kəda/ tij-əl/ ?  
 how do-SUBJ  
 ‘How should / will it be done?’

For that matter, this mood is fairly frequent and can be used as a self-standing predicate. Irrealis may in fact be a more adequate name for this mood. Of course, it is also triggered by some conjunctions, such as /ʃtobə/ ‘so that’ (< Russian *ш<sup>т</sup>обы*). In addition, the Subjunctive expresses the semantic load of conditional actions: /jakalen/ is ‘I would walk’. In that meaning, it can be reinforced by /bə/ <*бы, ба*> borrowed and calqued on Russian, which then eliminates any ambiguity. Zaicz (1998: 200) mentions similar constructions in Erzya.

Traditional descriptions, as in Aliamkin (2000: 137) or Zaicz (1998: 201), mention a Desiderative “mood”, expressed by a suffix /-leksəl-/ <*лексо<sup>л</sup>ь*> (or /iksel/ in Erzya). For example /jakaleksəlen/ ‘I’d like to walk’. In fact this suffix functions more like a peculiar lexical unit, that can be directly suffixed to the verb stem but this formal feature does not make it a verbal “mood”. The real verbal mood of this construction is the Subjunctive, indicated with the suffix /-(ə)l-/. From a diachronic point of view, this suffix /-leksəl-/ has been analyzed as a cluster of three suffixes: /-le-ks-əl/ and /jakaleksəlen/ could be glossed as ‘I’d like to do as if I were a walker’. See Aliamkin (2000: 137) and Bubrih (1953: 221) for the original suggestion.

- (9) /jaka-le-ks-əle-n/  
 walk-SUBJ-NR-SUBJ-1.SG  
 ‘I’d like to walk’

The negation is therefore /af-(ə)l/ in Mokša as is normally the case for Subjunctive: /afəleksəlen/, /afəleksəlet/, /afəleksəl/, /afəleksəleme/, /afəleksəlede/, /afəleksəlt/ followed with /jaka/.

Another verbal “mood” supposed to exist in Mokša is the Conditional (*Условнай*), as in Aliamkin (2000: 135-6) or Zaicz (1998: 200-1). This is in fact not a “mood” but a conjunction. Examples are: /jaka-Ndɛrɛ-n/<sup>14</sup> ‘if I walk’ and /jaka-Ndɛrɛ-le-n/ ‘if I walked’. The approach in manuals analyzes this conjunction /Ndɛrɛ/ <*ндяря*> ‘if’ as a verbal “mood” because it is suffixed to the verb stem. This is completely unacceptable. The conjunction /Ndɛrɛ/ <*ндяря*> ‘if’ can be used with either the Present or the Subjunctive. For example, /lama jaka-Ndɛrɛ-n/ ‘if I walk a lot’ /ʃuNbra-n/ ‘I am in good health’. Or with the Subjunctive, /lama jaka-Ndɛrɛ-le-n/ ‘if I walked a lot’ /ʃuNbra-le-n (bə)/ ‘I would be in good health’. The conjunction is inserted between the verb stem /jaka/ and the pronominal segments of the Present: /jakaNdɛrɛn/, /jakaNdɛrɛt/, /jakaNdɛrɛj/, /jakaNdɛrɛtama/, /jakaNdɛrɛtada/, /jakaNdɛrɛçt/, and those of the

<sup>14</sup> The nasal archphonem /N/ is [n] in /Ndɛrɛ/ ‘if’ and [m] in /ʃuNbra/ ‘healthy, in good health’.

Subjunctive: /jakaNɔɛɾɛlɛn/, /jakaNɔɛɾɛlet/, /jakaNɔɛɾɛl/, /jakaNɔɛɾɛleme/, /jakaNɔɛɾɛlede/, /jakaNɔɛɾɛɪt/. The negation is expressed with /af/ in Mokša (or /a/ in Erzya), and the conjunction remains suffixed to the verb stem: Present, /af/ /jakaNɔɛɾɛn/, etc. and Subjunctive: /afɔɛlɛn/ /jakaNɔɛɾɛ/, etc.

Some lexical units appear only with the Subjunctive mood, as /ɔɛmal/ <дямаль> ‘it should not, it must not’: /ɔɛmal koɪta/ ‘It should not be spoken about’ (Serebrennikov (ed.) 1998: 171). Another unit is /ɔɛl/ <дяль>: <штоба фкявок маци дяль кунда> ‘so that /ʃtobə/ no /fkɛvək/ goose /matsi/ be /ɔɛl/ captured /kunda/’ (Aliamkin 2000: 133) These units are reminiscent of English “modals”. The voiced initial indicates that these words are probable borrowings. The morphological alternation between /ɔɛmal/ and /ɔɛl/ looks Turkic. Cf. the Proto-Turkic suffix *\*-ma-* ‘not’.

## 5 The Medio-Passive Voice

In traditional descriptions, as in Zaicz (1998: 203) or in Serebrennikov (1998), the Medio-Potential voice<sup>15</sup> (возможностная форма) is dealt with as a lexical derivative of the simple verb and not as a full-fledged voice, contrasting grammatically with the Active voice. This purely lexical interpretation requires serious reservations. If it were really just a lexical derivative, it is hard to understand why a Medio-Potential form or “verb” does not have the same negative constructions as a simple non-Medio-Potential verb. For example, the Medio-Potential of /ʃaɪkəd/ <шархкод> ‘to understand’ is formed as follows: /ʃaɪkəd-i/ <шархкоди> ‘he (or she) understands’ → /ʃaɪkəd-əv-i/ <шархкодрави> with two different meanings: ‘(s)he can understand’ or ‘it can be understood’.

- (10) /ʃaɪkəd-əv-i/  
understand-MED.POT-3.SG  
‘(s)he can understand’ or ‘it can be understood’

When the suffix /-(ə)v-/ <-(o)в-> means ‘to be able to’, /ʃaɪkəd-əv/ can be suffixed by all pronominal suffixes of the three tenses of the Indicative and those of the Subjunctive. At first sight /ʃaɪkəd-əv/ behaves very much in the same way as /ʃaɪkəd/ and can be suffixed by a similar set of suffixes. But, when used with a negative segment, a dissymmetry appears: /af ʃaɪkəd-i/ ‘(s)he does not understand’ → /af ʃaɪkəd-əv-s/ [cannot] but /afez ʃaɪkəd/ ‘(s)he did not understand’ → /iz ʃaɪkəd-əv-s/ [could not].

In the Past tense, the negation is neither /af/ nor /af/ but only /iz/<sup>16</sup> <из> (Aliamkin 2000: 148). To deal with /ʃaɪkəd-əv/ as a lexical item of the same kind as /ʃaɪkəd/ does not account for some specific and conspicuous differences. It can be noted that this negation /iz/ is also used with verbs, the meaning of which entails the notion of *possibility*: /iz kener/ ‘he (or she) did not have the time to, could not’, /iz kener pajezditi/ ‘he (or she) missed the train’ (Serebrennikov 1998: 202).

<sup>15</sup> This word is meant as a formation similar to the Indo-European Medio-Passive voice.

<sup>16</sup> Or /iz/ depending on speakers.



- (11) /iz                    kener                    pajezd-ti/  
 NEG.PST                be on time                train-DAT  
 ‘(s)he could not be on time for the train’ = ‘(s)he missed the train’

Sources do not mention whether the form /ʃaŕkəd-əv/ can be used in the Future tense: such a form as /karman ʃaŕkədəvəma/ is unconfirmed and may not exist. This absence may signal that the Future is impossible with a Medio-Potential form, which would confirm that the Medio-Potential is indeed not just a lexical derivative, as traditional descriptions hold it to be, but a separate voice. Nor does it seem that Medio-Potential forms can be used in the Imperative or the Optative either, because the modal semantic load of the Medio-Potential conflicts with those of these moods.

In addition to these forms, with a mainly potential meaning, others exist with a clearer medio-passive and impersonal meaning. For example: /sjorma-sa koŕta-v-s/ ‘in the letter it was said’. Here, the verb is ‘to say, to speak’ /koŕta/ <коpxта> as in /mokʃəks koŕtan/ ‘I speak Mokša’.

- (12) /sjorma-sa        koŕta-v-s/  
 letter-LOC        say/speak- MED.POT-3.SG  
 ‘in the letter it was said’

Or /af koŕtavi/ ‘this is not said, this has not (yet) been said’, or still /af tije-*vi*/ ‘this is not done, this has not been done (yet)’. The semantics of possibility is sometimes more prominent: /iz ʃaŕkədəv/ ‘it was not understandable’. Traditional Uralistics considers this meaning to be original. Cf. Zaicz (1998: 203): “=v- makes reflexives and medio-passives [...] this suffix has clear cognates in Saamic, Fennic, Mansi and Hungarian (< pU \*=w).” We will see below that the Medio-Potential Participles do not behave as simple Participles either, when it comes to negation.

## 6 The participles and Gerund

Two types of Participle formations must be distinguished—a synchronically productive type and a residual group, with a limited and nonproductive set of items. Productive formations include Present and Past Participles. They can either be predicates or determine a noun, in this latter case they precede it. The Present Participle is identical to the verb in 3.SG Present: /saj piNge/ ‘future’ (lit. the time [piNge] which comes [saj]). Its negation is /af/: /af lama sodaj loman/ ‘a man [loman] who does not [af] know [sodaj] much [lama]’. It can also be nominalized: /erjaj/ ‘(who) lives [verb], living [participle], inhabitant [noun]’. The Past participle is built with a suffix /-f/ : /saf/ ‘come’, /sodaf/ ‘known’. Its negation is not /af/ but /apak/ <apak> and the verb stem is suffixed with -k (instead of -f) : /apak sodak loman/ ‘an unknown man’. These participles can be predicate: /son saj ~ saf/ <сон сай ~ саф> ‘He comes ~ he came’. It can be noted that the Past Participle does not necessarily have a passive meaning: /apak koŕtak/ ‘without having spoken (a word)’ (and not \*‘without being said’). This can be compared with the situation in Latin *loqui* ‘I said’ → *locutus* ‘having said’. The Mokšan Past

Participle conveys a perfective meaning, as in early Latin, and not a perfecto-passive meaning, as in later Romance languages.

As regards to Medio-Potential Participles, they only have a Present form with a passive value. For example, /sodavi(ks)/ (-ks is optional) does not mean \*\*\*‘that can know’ but ‘that can be known’. The negation is /af sodaviks/ ‘that cannot be known’, with the suffix /-ks/ being compulsorily added to the verb stem. Likewise /ʃaʔkədəvi(ks)/, /kelgəvi(ks)/ mean ‘understandable’, ‘lovable’ and not \*\*\*‘that can understand’, \*\*\*‘that can love’. The simple Participle and the Medio-Potential can easily be compared: /apak tik tev/ ‘a thing or affair [tev] not done [ti(j)-]’ ~ - /af tijeviks tev/ ‘a thing or affair that cannot be done (infeasible)’. If verbs in the Medio-Potential form were just lexical derivatives, how come they so strongly differ from the other verbal forms?

	Active voice		Medio-Potential (Present)
	Present	Past	
Affirmative	<i>soda-j</i> ‘knowing’	<i>soda-f</i> ‘known’	<i>soda-vi(ks)</i> ‘knowable’
Negative	<i>af soda-j</i> ‘unknowing’	<i>apak soda-k</i> ‘unknown’	<i>af soda-vi-ks</i> ‘unknowable’

Table 2. Productive Participle forms

In addition to these productive formations, there exist three suffixes: /-ada/ <-ада>, /-ez/ <-езь> and /-jn/ <-нь>. In present-day Mokša, none of these formations seems to be able to be a predicate and this is probably an indication about their ancient grammatical behavior in early Mordvin. The formation /-ada/ is little productive and includes mainly: /ozada/ ‘seating’, /steada/ ‘standing’, /panzada/ ‘being open’. These forms can either determine a noun, as in /panzada keNkʃka/ ‘through [-ka case-mark] the open [panz-da] door [keNkʃ]’, or a verb, as in /steada koʔtaj/ ‘He (or she) speaks (while) standing’. It is unclear whether the participles built with /-ada/ can be negated<sup>17</sup>. These participles are considered “Past” in Aliamkin (2000: 175) or “Present” (i.e. simultaneous) in Zaicz (1998: 205). They seem to refer to “Present” as they are parallel to the archaic<sup>18</sup> Past Participle built with /-jn/: for example, /kundajn/ ‘hunted, caught’, which is an alternative to /kundaf/, on the verb stem /kunda/. It seems plausible that these residual forms were originally in complementary distribution with those which have remained the most productive. The negation of this formation is /apak/<sup>19</sup>.

Another formation, relatively productive, is the suffix /-(ə)z/ <-зь>: /avardəz koʔtaj/ ‘He’s speaking, and (simultaneously)weeping’. This formation can never determine a noun, nor be a predicate. It is actually not a Participle, nor a nominal form of a verb, but should rather be considered a Gerund or converb, a circumstantial verbal form that can only appear subordinate to a Predicative verb<sup>20</sup>. When the action is either simultaneous or past, then the negative

<sup>17</sup> Zaicz (1998: 205) indicates that the Erzyan form *-do*: *stea-do* can be negated with *avolj*, the equivalent of Mokšan /afəl/. One would rather expect /af/ or maybe /apak/ in Mokša.

<sup>18</sup> The Erzyan equivalent is described as “folkloristic” in Zaicz (1998: 205).

<sup>19</sup> Cf. Zaicz (1998: 205).

<sup>20</sup> Cf. Zaicz (1998: 205) and Aliamkin (2000: 178-181).

segment is /af/ (Present) or /afəz/ (Past): /af pičədəz/ <аф пичедез> ‘without worrying’ but /šis niNge ašəz stea/ <шись нинге ашезь стя> ‘[with] the sun /šis/ having not /ašəz/ yet /niNge/ risen /stea/’.

There exists an interesting reduplicated formation, with a durative value: /kftiz kfti/ (lit.) ‘he (or she) dancingly dances /kfti/’. Aliamkin (2000: 179) also cites a combination with /tijež/ ‘(while) doing’, as in /avardəz tijež/ (lit.) ‘(while) weeping doing’, with an intensive value.

Participles	Present-day	Previous stage (hypothesis)
Present Predicate	<i>soda-j</i> ‘knowing’	* <i>soda-j</i> ‘knowing’
Present non Predicate	<i>soda-j</i> ~ (rare <i>-da</i> ) ‘knowingly’	* <i>soda-da</i> ‘knowing’
Past Predicate	<i>soda-f</i> ‘known’	* <i>soda-f</i> ‘known’
Past non Predicate	<i>soda-f</i> ~ (rare <i>-jn</i> ) ‘(being) known’	* <i>soda-jn</i> ‘(being) known’

Table 3. Reconstructed paradigm of Mordvin Participles

## 7 Summary of the Negative Segments in Mokša

The preceding discussions can be summarized as follows. On the whole, Mokša presents a highly differentiated system of negative segments: *af*, *iz*, *aš*, *tja*, *apak*, to which *a* (archaic) or \**ilja* (attested in Erzya) should be added. Nearly all verbal forms have (or used to have) a specific segment.

	Predicative	Non-Predicative
Indicative Present	af Verb-Ø-[PP] <sup>21</sup>	af Verb-(e)z-#
Indicative Past	iz/aš Verb-Ø-[PP]	aš-ez Verb-Ø-#
Indicative Continuous Past	af-əl-[PP] Verb-Ø-#	(?)
Subjunctive	af-əl-[PP] Verb-Ø-#	/
Imperative	tja-Ø-[PP] Verb-Ø-#	/
Optative	tja-za-[PP] Verb-Ø-#	/
Participle Present	apak Verb-j-#	apak/af (?) Verb-da-#
Participle Past	apak Verb-k-#	apak (?) Verb-jn-#

Table 4. Synoptic table of negative segments in Mokša (Active voice)

<sup>21</sup> PP stands for the “Personal Pronoun suffixes”, -# indicates that no PP can be suffixed to the form.

The traditional approach of the Medio-Potential voice as a “lexical derivative” unfortunately does not permit a full description of the negative paradigm. It is possible that many forms are not attested because they have no or too little practical value in the first place.

	Predicative	Non-Predicative
Indicative Present	af Verb-əv-[PP]	(?)
Indicative Past	iz/aš Verb-əv-[PP]	(?)
Indicative Continuous Past	(?)	/
Participle Present	af Verb-əvi-(ks)-#	(?)

Table 5. Synoptic Table of Negative segments in Mokša (Medio-Potential voice)

## 8 Comparative Survey within Uralic

Among Uralic languages, Mokša is peculiar for having a very large number of negative segments in use and comparison with Erzya, its closest sister language, suggests that this number may have been even higher in Proto-Mordvin. Even though most other Uralic languages display a simpler situation, they tend to prove that the complexity attested in (Proto-)Mordvin is inherited from Proto-Uralic itself.

The short segment *a-/o-* for negative Present is still well attested in Finno-Ugric:

- Erzya *a*, Mokša (archaic) *a-*
- Cheremis *a-* (KB), *o-* (U, B)
- Zyrian *o-*; Votyak *u-*

The suffixed “variant”<sup>22</sup> *a-š-* is well attested. It means ‘there is not’ and is used for Negative Past in several languages:

- Erzya *aš-*, Mokša *aš-* ‘there is not + Negative Past’
- Cheremis *aš-* ‘Negative Past’
- Selkup *aša* (Tass), *assa* (Turuchan.), *assa*, *ass* (Ket) (Present and Past)

The metaphonic segment *e-/i-* for negative Past is widespread. The front metaphony can be explained by the influence of PU \*j ‘Past’ (Cf. Redei 1988: 69). In several languages, this segment has been further suffixed by \*-ś-<sup>23</sup>:

- Zyrian *e-* ~ *i-* ‘was not’ (versus *o-* ‘is not’)
- Estonian (dial.) *es*, *is* ‘Past’ (versus *ei* ‘Present’)
- Erzya *ez-*, Mokša *iz-* ‘Past’ (versus *a-* ‘Present’)

In several languages, the metaphonic segment has been generalized for all tenses:

- Finnish *e-*, (dial.) *elä*; Estonian *e-*; Saami N. *i-* or *e-*
- Kamas *ej-* ‘was not’ (versus *e-le-* ‘is not’)<sup>24</sup>

<sup>22</sup> It is probably another word in my opinion. Cf. Mongolian *-ül* ‘(is) not’ ~ *es* ‘there (is) not, was not’. See below.

<sup>23</sup> This suffix (Cf. 3.SG.PST) also explains the geminate of Selkup *ass(a)*.

- Yurak *ńi-* (but Imperative *ńo-* with back vowel), Yenets *ńe-*<sup>25</sup>
- Nganasan *ńi-nt-* (with a suffix -nt-)
- Ostyak *ě-ntə* (Vach, Demianka) (with a suffix), *a-n* (Obdorsk) (with probably a deictic \*n)

The suffixation *-l-* for Imperative may be of Finno-Ugric date:

- Vogul *äl* (Tavda), *wil* (Konda), *ul* (Lozva, Sosva), *wul* (Pelymka)
- Ostyak *äl* (V), *át* (Demianka), *ál* (Obdorsk) (NB: -l- > -t- is a regular development)

There is no example of such a form in the Samoyedic subbranch. Moreover, Cheremis is *it* with -t-, not -l-. Rédei (1988: 68) lists Kamas *el-* but here, -l- is Kamas ‘Present’, contrasting with -b- ‘Past’: *nerē-l-iem* ‘I am afraid’ ~ *nerē-b-iem* ‘I was afraid’. The Kamas segment for Imperative is *i(:)* with no suffix: *i šo’* ‘[P2sg] don’t come’. The segment -l(e’)- is also used for Kamas Gerund: *nerēle’* ~ *ele nere’* ‘being (not) frightening’. This segment seems to originate in the PU derivative morpheme \*-l- which forms frequentative-durative verbs.

The suffixation *-p-* is probably of Uralic date:

- Finnish *epä* ‘mis-, un-’ (a prefix); Estonian (dial.) *ep, pole, põle* ‘not’
- Erzya *apa-k*, Mokša *af, apak* (Logically the reconstruction should be \**pp/Hp* > *p* as \**p* would be *v*)
- Zyrian (S) *abi*, (P) *abu*, (PO) *abo-(l)* ‘is not’.
- Koibal *abi timnem* ‘I don’t know’

It seems logical to conclude that \**a-pa* was probably an emphatic variant of the negative Present. Two other suffixations *are* attested: -t- and -k-. These forms are often used for the Imperative:

- Mokša *tja* < \**a-t-ja* (Optative, Imperative), Mokša, Erzya *a-pa-k*
- Cheremis *it, id-* (KB) (Imperative); *ok, oysel* (U) ‘not’ (Present)
- Vogul *at* (Konda), *at* (Lozva, Sosva) (Indicative); *äk* (Tavda) (Participle),
- Selkup *iki* (Tass), *ékka* (Ket) (Imperative)

Another rather rare suffixation is -n-:

- Ostyak *a-n* (Obdorsk) ‘not’
- Kamas *ene* ‘un-’: *ene-neyñōne* “unmelzbar [unmeltable]” (Donner 1944: 18)<sup>26</sup>

The suffixes -t-, -k-, -n- can be compared with PU deictics \*t, \*k and \*n. Rédei (1998: 69) considers \*-k- to be an Imperative morpheme and \*-t- to be a deverbal suffix. It can be noted that -p- cannot be put in relationship with a PU deictic. Rédei (1998: 69) considers it to be a Nominal FU suffix. This idea is coherent with *apak* being used with non finite verbal forms.

The comparative survey of verbal negation within Uralic can be summarized as follows:

<sup>24</sup> The generalization of the metaphonic segment is probably the reason why Kamas transformed the suffix *-le-* of Frequentative-durative derivatives into a Present tense marker.

<sup>25</sup> The development of initial \*ń or \*ŋ in Samoyedic before front or back vowels has nothing to do with a nasal negation \*n.

<sup>26</sup> It is interesting to note that this long-existent item is listed nowhere: neither in Rédei (1988) nor in “Nostraticist” sources like Bomhard (2008). The present article, therefore, does not claim to be exhaustive.

	Observations
*a-/*o-	1. ground form ‘not’
*a-pa-	Lengthened variant of obscure origin
*ak-/*ok- ; *at-/*ot- ; *an-/*en-	Emphatic variants with deictics
*a-j-/*o-j- > *ej-/*ij-	Metaphonic variant: *-j- ‘Past’
*al-/*o-l- ; *e-l-/*i-l-	Variants with <i>-le-</i> ‘Frequentative’
*es-/*iz	Metaphonic variant with <i>-ś-</i> ‘P3 Past’
*a-nt- ; *e-nt-	Variants with <i>-nt-</i>
*aš-	2. ‘There is not’ > Negative Past Variant

Table 6. Synoptic Table of Negative segments in Uralic

There is no reason why descriptive linguistics, typology and historical linguistics should remain impermeable fields. A careful description of verbal negations in the Uralic languages results in the possibility of accounting for this typological feature as diachronic processes of fossilized multiple suffixations.

## 9 Comparative Survey: the “Nostraticist” Approach

According to the “Nostraticist” approach, as represented by Bomhard (2008: 369) for example, Uralic is supposed to have inherited several negative segments from “Proto-Nostratic”. It is interesting to look at these proposals, now that the Proto-Uralic system has been dismantled.

### 1. \*-n-: Bomhard (2008: 369) mentions a nasal \*n-:

E. Uralic: Proto-Uralic negative particle \**ne* > Hungarian *nē, nēm* ‘not’; Cheremis / Mari *nō, ni: nō-mat, ni-ma-at, ni-mat* ‘nothing’, *ni-gū* ‘nobody’; Votyak / Udmurt *ni: ni-no-kin* ‘nobody’, *ni-no-ku* ‘never’, *ni-nomer* ‘nothing’; Zyrian / Komi *nōm, nem, nēm* ‘nothing’; Vogul / Mansi (Northern) *nee-mäter* ‘nothing’, *neem-hot* ‘nowhere’, *neem-huuñt* ‘never’; Ostyak / Xanty (Northern) *nem-hōjat* ‘nobody’, *nem-huntta* ‘never’, *nematti, namatta* ‘nothing’ (cf. Greenberg 2000: 212; Collinder 1955: 38; Rédei 1988: 301).

To this could be added Kamas *ene-* which seems to have been overlooked by about all authors. It can be noted that Hungarian is conspicuous for having no reflexes of the Proto-Uralic system mentioned before and for having negations only with nasals: *ne* ‘don’t’, *nem* ‘not’, *nincz* ‘there is not’. This feature betrays, in my opinion, the influence exerted on Hungarian by Indo-European languages, the Indo-Iranian sub-branch to start with. Moreover, it is unclear in these items if the negative load is conveyed by *-m-* or *-n-*. Rédei (1988: 301) considers that the words, listed above in several Uralic languages, are derived from the deictic stem \**n*. This can be accepted only in so far as the negative load is then conveyed by *-m-*, even though Rédei does not make this suggestion. It can be further added that “Altaic”, as dealt with in Bomhard (2008), only has a shaky instance of \**n-* in Chuvash *an-*, where it can just as well be a loanword from Indo-European languages or be a compound \**a-* + deictic \**-n-*, as in Kamas. The risk that the phoneme /n/ has nothing to do with Negation and Proto-Indo-European (PIE) \**ne*, but is a deictic, as proposed in Rédei (1988: 301), should not be underestimated.

Starostin-Dybo-Mudrak (2003) also lists (Old) Japanese words: *ina* いな ‘no’, *inam-u* 否む ‘to deny, to refuse’. Modern Japanese has *-nai* ‘is not’. Here again, the Negative load is probably in the initial vowel and not in the nasal.

2. \*-l-: Bomhard (2008: 371-372) mentions a lateral *\*al-*, *\*əl-*, *\*el-*, *\*ul-*:

Uralic: Proto-Uralic *\*elä* imperative of the negative auxiliary verb (cf. Collinder 1977: 26). Marcantonio (2002: 239) describes the patterning in Finnish as follows: A negative verbal form is used in Finnish also in the Imperative, as shown by the pair *lue* ‘read’ vs *älä lue* ‘do=not read’ (2<sup>nd</sup> Person Singular). The negative form *älä* is often compared with the equivalentl Yukaghir *el ~ ele*. Equivalentl negative verbs and related isomorphic constructions are found in the majority of the Tungusic languages (*e ~ ä-*), in Mongolian (*e-se*) [...] and in Dravidian. Rédei (1988: 68-70) treats the negative verb *\*e-* and the imperative *\*elä* together, as do many others, including Collinder and Tailleur. As noted by Greenberg (2000: 214), these two forms are so closely intertwined, often through suppletion, that it is difficult to distinguish one from the other. [...] Clearly, we are dealing with two separate forms here. The first is the Proto-Nostratic negative particle *\*e* ‘no, not’, and the second is the negative verb *\*al-* (*~ \*əl-*) ‘to be not so-and-so’.

From the Uralic point of view, a comparison of PU *\*a/o-l-* or PU *\*e-j-l* with any other language can make sense only if *-l-* can be shown to be a Frequentative-durative verbal suffix and if the front vowel can be explained by a Past suffix *\*-i/-j-* in (a previous stage of) the language. The idea that the bare and the suffixed negations should be dealt with separately, as proposed in Bomhard (2008: 372) cannot be accepted. The comparison of Uralic with “Proto-Altaic *\*ule* (*~ -i*) negative particle: Proto-Mongolian *\*ülü* [...] > Written Mongolian *ülü*; Khalkha *ül*; Buriat *üle*; Kalmyk *üle*; Ordos *üle, ülü*; Moghol *la, lü, le*; Dagur *ul, ule*; Dongxian *ulie*; Shira-Yughur *lə*; Monguor *li, li*” in Bomhard (2008: 373) makes sense as Mongolian has a back-vowel and it cannot be doubted that the suffix *-l-* indeed has a frequentative-durative value: *bari-* ‘to grasp, to hold’ > *bari-lda-* ‘to wrestle’; *jari-* ‘to speak’ > *jari-ltsa-* ‘to talk, to have a conversation’.

As regards Yukaghir *el-*, there is no apparent trace of a Past suffix *\*-i/-j-* in the verb system, but it is very interesting to note that this negation has an implicit Perfective (rather than Past) feature:

The verb morphology is clearly aspect-dominated; the regularly marked aspects are the Imperfective, Ingressive, Resultative, and Habitual: Imperfective *-nu- ā-nu-m* ‘he is, was making, makes’ [...] The only obligatorily marked tense distinction is Future vs. Non-Future (the suffix *-te/-t-* for Future, and zero marking for Non-Future) [...] Non-Future *ā-m* ‘he is making, made’ [and] Non-Future *ā-te-m* ‘he will make’. (Maslova 2003: 5-6).

The situation is made even clearer with this example: “*oj-l'e-ŋi* [NEG-be-PL ...] they were not [...]”. (Maslova 2003: 160). The Negative segment *oj-* of Yukaghir is the same as PU *\*a/o-j-*. Yukaghir and Mordvin Imperative forms can also be compared: Erzya *ilja mora* ‘do not sing’, as seen before and Yukaghir *el-ā-ŋi-le-k* ‘do not make (2.PL)’. This latter form is conspicuous for having two explicit identical negations *#el-/le-*. It can also be noted that *-k* is not the Imperative marker in Yukaghir and this sheds doubt on the usual theory that *-k* in Mokša, *tja-k mora* ‘do not sing (2.SG)’, is an Imperative morpheme (Rédei 1998: 69): it is better considered to be 2.SG in general in my opinion.

(13) *el-ā-ŋi-le-k* (Yukaghir example)

NEG-MAKE-PL-PROH-2.SG  
 ‘do not make (2.PL)’

3. Miscellaneous: Bomhard (2008: 373) lists a number of other Negative segments, supposedly based on \*<sup>?</sup>e-:

Altaic: Proto-Altaic \*e negative particle: [1] Proto-Tungus \*e- ‘not’ > Evenki e- ‘not’; Lamut / Even e- ‘not’; Negidal e- ‘not’; Jurchen *ey-χe*, *esi(n)-in* ‘not’; Ulch e- ‘not’; Orok e- ‘not’; Nanay / Gold e- ‘not’; Oroch e- ‘not’; Udihe e- ‘not’; Solon e- ‘not’. [2] Proto-Mongolian e-se ‘not’ > Written Mongolian *ese* ‘not’; Khalkha *es* ‘not’; Buriat *ehe* ‘not’; Kalmyk *es* ‘not’; Ordos *ese* ‘not’; Moghol *sa*, *se* ‘not’; Dagur *es* ‘not’; Monguor *sə*, *sī* ‘not’.

Starostin-Dybo-Mudrak (2003) lists other segments, not dealt with in Bomhard (2008): Evenki *āč̣in*, Even *ān*, *āč̣*, Negidal *āč̣in*, Literary Manchu *aqu*, Ulcha *ana*, Orok *ana*, Nanai *anā*, Oroch *ana*, Udighe *anči*, Solon *aṣ̌i*. They clearly mix up combinations of several deictics. Some can be compared with Mordvin *aṣ̌-*, others with PU \**an-* or \**ak-*.

4. It can be noted that many families show traces of the Past tense or Perfect aspect marker -j-: Uralic *a-* ~ *ei-*, Yukaghir *el-* ~ *oj-*, Tungusic *aqu* ~ *ey-χe*, Mongolian *ul-* ~ *e-*. Japanese seems to have only the front vowel form \**i-na-*. In some rarer cases, the negative segment is not a prefix but a suffix: Mongolian \**-ügəj*, Japanese *-na(i)*, Yukaghir *-le-*. It can also be noted that Turkic is conspicuous for having about no traces of the system that can be retrieved in Uralic, Yukaghir, Mongolian, Tungusic and Japanese. This could be used as an argument against the Altaic hypothesis, to say nothing about Korean.

## 10 Comparative Survey: A Preliminary Analysis

The external comparative survey suggests that several combinations of Negative segments identified in Uralic can be found in other Eurasian families or languages. A comparative table of attested forms can be summarized as follows:

	Uralic	Yukaghir	Mongolian	Tungusic	Japanese
‘is not, was not’					
*a-/*o- (Present)	*a-/*o-	(Cf. o-)	(Cf. u-)	(Cf. a-)	/
Suffix -j- (Past)	*e(j)	oj-	(Cf. e-)	*e-	(Cf. i-)
Suffix -l- (Durative)	*al- / *el-	el- / -le-	*ul-	/	/
Suffix -nt-	*ant	/	/	/	/
‘there is not’					
*ač̣-	*aṣ̌-	/	*es- (?) <sup>27</sup>	*ač̣-in	/

Table 7. Most basic Negative segments in Uralo-Altaic languages

Increments	Uralic	Yukaghir	Mongolian	Tungusic	Japanese
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<sup>27</sup> Semantically, this item seems to originate in two different segments: \**o-j-ṣ̌-* and \**aṣ̌-*.



Suffix <i>-p-</i> (value ?)	*a-(p)pa-	/	bu (?) <sup>28</sup>	/	/
Deictic <i>-k-</i> (or <i>*-q-</i> )	*ak-/*ok-	/	*-ugəj	*eyq- / aqu	/
Deictic <i>-t-</i>	*at-/*ot-	/	/	/	/
Deictic <i>-n-</i>	*an-/on- /en-	/	/	*an-	OJ i-na-
Pronoun *ś (3.SG)	*es-/*iz		*es- (?)	*es-in	

Table 8. Incremented Negative segments in Uralo-Altaic languages

The morpheme 3.SG.pst \*ś is attested in Yukaghir but it is never directly suffixed to the Negative segment #*el-* as this element is proclitically prefixed to the verb stem in that language. Cf. *kewe-s'* 'he went' (Maslova 2003: 27) [with Perfective aspect] but *el-oža-nu-j* 'he did not drink' (Maslova 2003: 26) [with *nu* of Imperfective aspect] .

## 11 Conclusion and Perspectives

The paper has made a thorough survey of verbal negative morphemes in Mokša. It appears that the tenses, moods and voices, usually described in the literature on this language certainly require some emendations, as some moods should not be described as such and the medio-potential “derivatives” should be described as a full-fledged voice.

Mokša and its sister-language, Erzya, are conspicuous for having a very large set of negative morphemes but this situation is shared by most other Uralic languages, although not to the same extent. This feature seems to be inherited from Proto-Uralic itself and the internal corpus of forms among Uralic languages can be analyzed and dismantled in basic morphemes, involving deictics and tense markers in addition to other morphemes of unknown lexical or semantic status.

In the paper Uralo-Altaic languages have been cautiously surveyed in a typological and areal perspective but in my opinion, it cannot be excluded that the typological situation of having a large set of negative segments for verbs that can be observed in a number of Uralo-Altaic languages may also have a genetic relevance. In that case it would be a criterion to be used in disentangling the Uralo-Altaic “controversy”.

<sup>28</sup> This segment can also be explained as being \*mu > bu. It is interesting to note that Mongolian is reconstructed as \*būi or bu. Cf. Starostin-Dybo-Mudrak ( 2003: 893). The final -i- may be the Past marker -j-.

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