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REPORTATIVITY AND TEMPORAL PERSPECTIVE: ON THE EVIDENTIALITY OF THE PARTICLES *ULMAŠ* AND *ƏLƏN* IN THE MARI LANGUAGES

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Abstract. The Mari languages possess a set of temporally ambivalent TAME constructions containing the particles *âl'e* and *ulmaš* in Meadow Mari as well as *âl'ə* and *âlən* in Hill Mari. The variation between the particles is evidential by nature: *âl'e* and *âl'ə* mark direct source of information, while *ulmaš* and *âlən* encode an indirect one. However, the indirect readings of the latter ones are affected by the temporal interpretation of the clause: when expressing pastness, *ulmaš* and *âlən* may indicate either inferentiality, mirativity or reportativity, while with present tense reference they lack the reportative function. I explain this with the notions of perspective time and perceptual field, illustrating that the perspective structure of the particle constructions with *ulmaš* and *âlən* is suitable for the reportative reading only on the past stratum. The results elaborate the claim that the particles form an event-level (deictic), not a propositional-level (semantic) evidential system.

Keywords: temporality, evidentiality, reportativity, perspective time, perceptual field, deixis, Mari languages

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1. Introduction

The closely related Uralic languages Meadow Mari and Hill Mari (commonly referred to as *Mari*) express evidential meanings as part of their past tense paradigm. A consensus exists that Mari possesses a binary evidential system distinguishing roughly speaking between direct and indirect sources of information, the latter being characterized by additional mirative overtones (e.g. Serebrennikov 1960: 170–178; Pengitov, Galkin & Isanbaev 1961: 190–197; Alhoniemi 1985: 121–122; Skribnik & Kehayov 2018: 536–539; Riese, Bradley & Yefremova

2022: 209–227; Mordashova 2023: 336–337). This is the case for both synthetic past tenses and what has been called the analytic past tense constructions. Nevertheless, the exact nature of their evidential values is still a question under debate. The above-cited studies suggest that the Mari past tenses refer semantically to eye-witness and non-eye-witness types of knowledge acquisition. By contrast, in Spets (2025a) on the evidentiality of the analytic past tenses I argue for a deictic analysis instead and propose that the evidential and mirative dichotomy is actually related to speaker's observation point either inside or outside of the described event. In this paper, I elaborate my claim on the deictic basis of the Mari verbal evidentiality. The discussion is centered around an observation that has slipped from the focus of studies so far, namely that the types of information sources a single element may encode vary according to the deictic temporal reading of an utterance.

A case in point are the so-called analytic past tenses of the evidentially indirect type. Mari languages possess a set of past tense constructions that consist of two parts: (1) finite verb forms in present tense,[1] and (2) past-marking particles *ə̑ľe* and *ulmaš* in Meadow Mari as well as *ə̑ľə̑* and *ə̑lə̑n* in Hill Mari. The difference between the two particles in each language lies in evidentiality so that *ə̑ľe* and *ə̑ľə̑* encode a direct source of information, while *ulmaš* and *ə̑lə̑n* express an indirect one. Crucially, in addition to expressing past location of events, the constructions have also bleached semantically so that the meaning of pastness may be completely absent in some cases and the particles function solely as epistemic modifiers (Serebrennikov 1960: 178; Mordashova 2023: 342–343; Spets 2025a). Thus, instead of 'analytic past tenses', the particle constructions are better understood as temporally ambivalent TAME constructions. The evidentially indirect particles *ulmaš* and *ə̑lə̑n* may hence appear in utterances with either a past or a present tense reading depending on the context. However, the evidential values of the particles are not identical in the two temporal interpretations. When expressing a past event, the particles may contextually refer either to

1 Note that in some clause types the predicate slot is filled with other elements than finite verb forms. In copular clauses there might actually be no overt lexical verb of 'being', since the present-tense copula can be omitted. This is the case in example (2) below. In existential clauses, the existential words *ulo* and *ulə̑* 'there is' and *uke* 'there is not' are used. This is the case in example (11) in Section 4.2.

speaker's inference, a reportative source of information or their mirative stance towards an unexpected information (e.g. Skribnik & Kehayov 2018: 536–539). This is demonstrated in the examples below. In (1a), the construction with *ulmaš* refers to a past event and indicates that the preparing for an exam was not directly observed by the speaker. In principle, the evidential readings include all the three aforementioned options, as shown under the translation line. However, the subsequent clause in (1b) specifies that the actual source of information in this case is his mother's report.

(1a) Meadow Mari

tol-m-em	*γoδâm*	*Jâβan*	*ekzamen-lan*
come-VN-POSS1SG	during	Yyvan	exam-DAT
jamδâlalt-eš	***ulmaš***.		
prepare-3SG	*ulmaš*		

'When I came Yyvan was preparing for the exam.' (Riese, Bradley & Yefremova 2022: 223)

1. I inferred it from what I sensed. (inferential)
2. I was told so. (reportative)
3. I was surprised to find out. (mirative)

(1b) Meadow Mari

aβa-že	*tâγe*	*kalasâ-š*.
mother-POSS3SG	like.that	say-PST1.3SG

'That's what his mother said.' (Riese, Bradley & Yefremova 2022: 223)

By contrast, in utterances with present-tense interpretation the particles are not capable of expressing report but only inference or mirative stance. The lack of reportative function is already visible in the sporadic grammar attestations of the non-temporally used particles (see Serebrennikov 1960: 178; Mordashova 2023: 342–343). However, in order to investigate the issue more closely, I have conducted a corpus study where I analyze the functions of the particles in present-tense clauses. An illustration is given in the examples below. In (2), the speaker infers that they might be dreaming. In (3), they are surprised to see their friend logged in a chat, activating the mirative reading.

(2) Hill Mari

ma	*tiδə?*	*omə̑n*	***ə̑lə̑n***	*ma?*	*uke,*	*omə̑n*	*aγə̑l.*
what	this	dream	*ə̑lə̑n*	Q	no	dream	be.NEG.3SG

‘What is this? Is this a dream? No, it is not a dream.’ (Egorkina 2012: 31)

(3) Meadow Mari

a	*tə̑j*	*al'e*	*o-t*	*male*	***ulmaš***	*:)*
but	2SG	yet	NEG-2SG	sleep.CNG	*ulmaš*	:)

‘You are not sleeping yet :)’ (Social media corpus)

I will argue that the variation in the possibilities of the reportative reading is a result of the temporal perspective properties of the particle constructions. As will be seen, the constructions make separate references to the temporal coordinates of speech time and perspective time, i.e. the time when the utterance is produced and the time when the speaker observes the described event. The evidentiality of this kind of perspective constructions is based on the deictic concepts of perceptual field and observation position towards the event as introduced by Faller (2003, 2004). Since the separation between speech time and perspective time functions differently for past and present events, the temporal interpretation of the utterance affects the observation positions the speaker may have towards the event. The main point is that unlike inference and mirativity, reportative readings require the perspective time to precede the speech time. Thus, the Mari particle constructions only license reportative readings in expressions with past interpretation. This is a major symptom of how the constructions do not refer to concrete acts of information acquisition as semantic evidentials would do but operate on the level of event structure.

The paper is organized as follows. Section 2 presents the data and methods used in the study. Section 3 presents the Mari tense-fused evidential system and introduces the competing semantic and deictic approaches to their evidentiality. Section 4 discusses the role of perspective time in evidential expressions and presents the temporal perspective structure of different information sources, explaining also the lack of reportative reading for *ulmaš*/*ə̑lə̑n*. Section 5 discusses the deictic and semantic evidential systems more in detail and equates them to what Faller (2003, 2004) calls event-level and propositional-level evidentiality. Finally, Section 6 summarizes the results and indicates their relevance for broader questions on evidentiality as a TAME category.

2. Data and methods

The data of this study originates in written corpora. The Meadow Mari data consists of short stories published in three volumes of the cultural journal Onchyko (1996, 1997, 2008) as well as chat discussions stored in the Social media corpus within the portal Corpora of Uralic Volga-Kama languages (see Arkhangelskiy 2019). Each of the 12 issues in the three volumes of Onchyko includes around 64.000 words, making the total number of words approximately 2.11 million. The Social media corpus, in turn, includes approximately 3.59 million words.

The Hill Mari examples origin from four short story collections (Beljaev 1982; Egorkina 2012; Tarjanov 1968; Valka 2007). The estimated number of words in the Hill Mari corpus is approximately 93.000 words.

I have collected all the attestations of *ulmaš* and *ôlôn* in clauses with present-tense interpretation. The total number of the sample is 74 from which 63 cases represent Meadow Mari and 11 cases Hill Mari. Given the size of the corpora, the prevalence of the particle marking cannot be considered high in written Mari. In spoken Mari, however, the usage might be more frequent, as supposed in Spets (2025a: 211–212).

I have included in my sample all instances where the particle-marked clauses refer to present events. The distinction between present and past readings of a polysemous construction is always made in context. Signs of present-tense semantics that have guided my sampling of the examples are (1) occurrence along temporal adverbs with present-tense semantics like ‘now’, (2) occurrence in contexts where the speaker refers to the settings of the speech situation, and (3) occurrence in contexts where also the surrounding clauses are marked with present tense and a past interpretation is unnatural.

3. Evidentiality in Mari

In this section, I discuss the nature of Mari grammatical evidentiality. Subsection 3.1 introduces the Mari tense system and the relevant perspective properties of the past tenses. Subsection 3.2 focuses on the analytic particle constructions and presents the two different accounts concerning their evidential properties.

3.1. The Mari tense system

The core of Mari tense system consists of three synthetic tenses that serve as temporal and aspectual portmanteau operators: one non-past tense and two past tenses. Table 1 with affirmative forms of the 2nd person singular forms of verbs Meadow Mari *âštaš* and Hill Mari *əštäš* 'to do' presents the tenses as well as their main temporal and aspectual functions according to Spets (2023).

Table 1. Mari synthetic tenses.

Tense name	Meadow Mari	Hill Mari	Main temporal and aspectual values
Non-past tense	*âštet*	*əštet*	present imperfective, future perfective
Simple past tense I	*âštâšâć*	*əštəšəc*	past perfective
Simple past tense II	*âštenat*	*əštenät*	present perfect, past perfect (in narration), past imperfective

As already stated, there is also a set of analytic TAME constructions that may contextually refer either to past or present events. The constructions are combinations of lexical verbs in synthetic tenses with present tense reading (the present imperfective alloseme of the non-past tense and the present perfect alloseme of the simple past tense II) followed by the aforementioned particles *âl'e*/*âl'â* and *ulmaš*/*âlân*. Table 2 presents the analytic constructions with 2nd person singular affirmative forms.

Table 2. Mari analytic TAME constructions with *âl'e*/*âl'â* and *ulmaš*/*âlân*.

Tense of the lexical verb	Meadow Mari	Hill Mari
Non-past tense	*âštet âl'e*	*əštet âl'â*
	âštet ulmaš	*əštet âlân*
Simple past tense II	*âštenat âl'e*	*əštenät âl'â*
	âštenat ulmaš	*əštenät âlân*

Formally, the particles display 3rd person singular past tense morphology of the verbs *ulaš* (Meadow Mari) and *ə̑laš* (Hill Mari) 'to be': *əl'e*/*əl'ə̑* are forms of the simple past tense I while *ulmaš*/*ə̑lə̑n* represent simple past tense II conjugation (although the Meadow Mari *ulmaš* is morphologically irregular, containing the nominal derivation suffix *-maš* instead of an expected simple past tense suffix -(*ə̑)n*). Due to their morphosemantics, their most frequently attested function is temporal modification where they shift the interpretation of the lexical verb into past from the utterance time.[2] Thus, when occurring after a verb in the imperfectivity-encoding non-past tense, the particles cause a reading of past imperfectivity, as in example (1a) above. Similarly, when the lexical verb is in the present perfect form simple past tense II, the utterance gets a past perfect reading, as in (4) below:

(4) Hill Mari

to-kə̑-na	*tol-ə̑n*	*šo-mə̑kə̑,*	*kečəβäl*
home-ILL-POSS1PL	come-CVB	arrive-CVB.PRI	noon
ertält-en	***əl'ə̑***.		
pass-PST2.3SG	*əl'ə̑*		

'The noon had passed when I came home.' (Krasnova et al. 2017: 134)

However, as already illustrated, in some contexts the particle constructions have no reading of pastness. Actually, already in the past-expressing examples like (1a) and (4) the functions of the constructions go beyond simple temporal location. As Table 1 shows, the simple past tense II can also express imperfective and perfect viewpoint in the past stratum and could in principle replace the analytic structures in the aforementioned examples. Spets (2023) argues that the variation between the synthetic and analytic past tense constructions can be explained by differences in their perspective structure.

The common aspectotemporal semantics of both the simple past tense II and the analytic particle constructions (in their past readings) can be depicted by the Reichenbach's (1947) system of three temporal coordinates: the speech time, the event time and the reference time. The speech time is the time of utterance, while the event time refers to

2 In typology, this kind of markers are called 'retrospective shift markers' (see Plungian & van der Auwera 2006: 344–345 for the issue cross-linguistically as well as Mordashova 2023 and Spets 2023 for retrospective shift in Mari).

the run-time of the described event on the time axis. Both types of the concerned Mari past tense constructions express that the speech time is separated from the event time, i.e. the former follows the latter. The reference time, in turn, is an aspectual parameter that specifies the relative location of the event with respect to other temporal intervals in the discourse. In case of imperfective aspect, the reference time is included in the event time, which presents the event as ongoing at the moment and opens a view into its internal structure. In contrast, perfect operators set the reference time at the relevant limit of the event, turning thus attention to the result of the event. Finally, perfective operators, such as the Mari simple past tense I, situate the reference time fully outside the event time, which means that the phasal structure of the event is not pointed out, but the event is seen as a single whole. (See also Comrie 1976 and Johanson 2000.)

By far, it seems clear that the Reichenbachian approach is not capable to distinguish the Mari aspectually synonymous past tenses from each other. Thus, a fourth temporal coordinate is needed. This is the perspective time, which was introduced in neo-Reichenbachian theories of tense semantics and discourse structure like Kamp & Reyle (1993: 593–601). Unlike the three other points that locate the event at the time axis, the perspective time refers to the interval from which the speaker observes the described event.

In simple cases, events are observed from the speech time, i.e. the perspective time and the speech time overlap. This is the perspective structure of the simple past tense II, which only locates an event into a past interval without pointing out more detailed relations between it and the speaker. However, the perspective time may also be separated from the speech time and be shifted to the past reference time of the event. This is what the particle constructions do. As explained in Spets (2023: 297–298), the tenses with the present value as part of the construction indicate an observer who is situated at the reference time of a past event. The tense with present value thus expresses that the state of affairs is viewed when it occurs, meaning that the perspective time is accommodated at the reference time. The past-marked particle, in contrast, specifies the actual location of the speaker at the speech time outside the event time and the reference time. Figure 1 below illustrates the temporal perspective structure of the particle constructions.

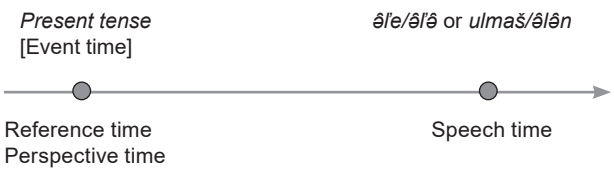

Figure 1. Temporal perspective structure of the particle constructions.

To put it differently, two perspectives cross in the description of the event: one from the reference time and another from the speech time when the speaker recounts this earlier observation. In this sense, the particle constructions represent so-called multiple perspective constructions where one state of affairs is observed from two different vantage points in a single semantic dimension, in this case time (see Evans 2005: 99–100). The semantic motivations to employ multiple perspective particle constructions over the synthetic past tenses will be discussed in Section 4, as will also be the separation between two observer positions in the non-past contexts. Before that, the next subsection presents the current views on the evidentiality of the particle constructions.

3.2. Evidentiality of the particle constructions: two approaches

The temporal perspective structure of the particle constructions (in their past readings) is the same regardless of the form of the particle. The motivation for choosing between *âl'e*/*âl'â* and *ulmaš*/*âlân* is evidential variation according to direct and indirect sources of information, respectively. In Mari studies, there are two competing ways to understand the labels 'direct' and 'indirect' source of information. Most of the accounts (see the references in Section 1) use the labels as hypernyms for different modes of gaining information in the spirit of Aikhenvald (2004: 25–29): the knowledge comes from "direct" sources if it is based on sensing or participation, while "indirect" sources include different types of inferences and hearsays. I call this approach 'semantic', since it explains the particles as having fixed denotations outside the speech situation, e.g. the act of 'seeing', the act of 'assuming' et cetera.

By contrast, in Spets (2025a: 194–200) I take a different stance and propose a deictic analysis instead. Here the particles vary according to the speaker's observation position towards the described event. A central concept is the 'perceptual field' introduced originally by Faller

(2003; 2004) for Cuzco Quechua. Perceptual field is a set of locations that the speaker has perceptual access to at the reference time. The locations include those that are near and big enough to sense and that the speaker pays attention to (Faller 2004: 69–71). Operators that refer to a perceptual field are thus sensitive to both the temporal duration and the spatial location of an event. In words of Faller (2004: 48), the approach is based on "the neo-Reichenbachian tense/aspect semantics augmented with a spatial component".

According to Spets (2025a: 194–200), the Mari particles refer to the speaker's perceptual field by distinguishing between events that are included and those that are excluded from it. In this account, *âl'e*/*âl'â* marks that the event was situated inside the field. The speaker was thus present at the event time, spatially close enough for observing the situation and mentally aware of it, which in evidential sense is interpreted as a sign of participation or direct sensory contact as well as non-mirative stance. This is the case in the example (4) above where the speaker recounts an event they saw. In contrast, *ulmaš*/*âlân* marks either a separation between the speaker's location and the spatiotemporal coordinates of the event or the speaker's mental inability to recognize it. Inferential readings arise from the fact that the event has already ended at the reference time, and the speaker's perceptual field includes only the traces that remain. In hearsay information, the event lies behind the original reporter, as in example (1a). Finally, mirative stance means that the speaker is not paying proper attention to what is taking place around them. This exclusion from the perceptual field enables wrong expectations regarding the event.

This said, the deictic approach may seem just a pointless modification of terminology, and it is true that in many cases the semantic model is capable for accounting for the particle variation. However, as demonstrated in Spets (2025a: 198–200), there are cases where it fails, and the deictic way serves a solution. The indirective *ulmaš*/*âlân* is namely employed also in cases where the event is seemingly directly observed by the speaker, and also the traditional definitions of mirativity cannot explain the usage. Consider example (5) below:

(5) Meadow Mari

aβa-m		*man-mə̑-l=ak,*		*lišn=ak*	
mother-POSS1SG		say-VN-COMP=EMPH		near.LOC=EMPH	
peš	*ć̆aple*	*kukšo*	*kož*	***kij-a***	***ulmaš***.
very	fine	dry	spruce	lay-3SG	*ulmaš*

'As my mother had said, there was a very fine dry spruce lying near our house.' (Spets 2025a: 198)

Here the speaker comes to the forest and perceives with their own eyes the event of a spruce lying there. Also, there is no shade of counter-expectation or surprise, as they have just been instructed what to expect by their mother. Thus, one would expect the evidentially direct marking with *ə̑l'e*/*ə̑l'ə̑*. I explain the indirect marking with the cognitive criterion of 'paying attention' defined for the perceptual field. Without the mother's words, the speaker most likely would not have observed the spruce. The indirect particle thus emphasizes that the event was originally outside their perceptual field and became included in it with delay and only through the external advice that turned their senses to the right direction (Spets 2025a: 198–200). Also for Faller (2004: 81–82), mirativity as a category expresses that the event enters the speaker's consciousness in an unusually slow pace.

Hence, the two particles form a perspective-based opposition that may give rise to evidential-like interpretations without pointing out any actual sources of information. Crucially, the ability to establish a perceptual field is related to the multiple perspective structure of the constructions. The perceptual field defines the way in which the observer is in touch with the described event. This kind of semantics requires a perspective structure where the past event is observed from a temporal coordinate other than the speech time, as the speech time in past expressions is by default occupied by an observer who is already separated from the original event.[3] Perspective structure is hence central

3 When it comes to the evidentiality of the synthetic past tenses, the simple past tense II cannot express evidential meanings in past narration due to its perspective structure that sets the perspective time at the speech time (see Spets 2023: 297–298). Evidential values of the same tense referring to result states in the present stratum, such as *Maša tolə̑n* 'Masha has come (by now)', may contextually carry evidential tones of indirect information source (e.g. Skribnik & Kehayov 2018: 536–537); however, these have not been discussed with deictic terminology of perceptual field.

for the evidential interpretations of the Mari particle constructions. The next section will turn attention to the reportativity issue of *ulmaš*/*ôlôn* by discussing the perspective time as a component that gives rise to evidential meanings.

4. Perspective time and evidentiality

This section shows the effects of a distinct perspective time for the evidential interpretations of utterances. Subsection 4.1 discusses how the perspective time can be understood as a component of evidential expressions. Subsection 4.2 presents the contribution of the perspective time in the evidential interpretations of the Mari particle constructions and explains the lack of reportative meaning for *ulmaš*/*ôlôn* in non-past expressions.

4.1. Perspective time as an evidential component

As shown in the previous section, the perspective time is the interval when the speaker observes an event, or in words of Kamp (2013: 116), a moment "from which the given information is viewed". Since evidentials by definition are items that mark the speaker's relation towards the information, it should not come as a surprise that tense-aspect operators which overtly refer to the separation between the speech time and the perspective time are prone to developing evidential meanings. Studies on different languages show how for example pluperfects are used not only for locating events on the time axis but for pointing out perceptual and cognitive relations between the uttered information and the subject referent of the clause (e.g. Kamp & Reyle 1993: 593–601; Oversteegen & Bekker 2002: 137; Pallaskallio 2016; Becker & Egetenmeyer 2018). The following examples illustrate this. In (6), the story line consists of one simple past tense that sets the perspective time at the speech time as well as three pluperfects with an event-internal perspective time.

(6) *Fred arrived at 10. He* ***had got up*** *at 5; he* ***had taken*** *a shower and* ***had left*** *the house at 6:30.* (Kamp & Reyle 1993: 594, shortened)

A simple need to locate the last three events in the past from the 'arrival' is not the only reason to employ the pluperfect. As shown in Spets (2023: 296), the same temporal ordering could be expressed also by using only simple past tenses and temporal adverbs, as in example (7):

(7) *Fred arrived at 10. This was after he first **got up** at 5, **took** a shower and **left** the house at 6:30.*

In (7) all the events are viewed from the speech time after the events had ended. By contrast, in (6) the pluperfects set the perspective time at the reference time, which in this case is the temporally subsequent event of arriving. The events are thus not seen from the perspective of the story-external narrator but from the viewpoint of the story-internal subject referent Fred who at that moment recalls his earlier acts. The perspective time points out Fred's cognitive access to the forwarded information.

Due to the reference to knowledge formation processes inside the story, Lee (2011) calls the perspective time "evidence acquisition time". It is the time of being in touch with the relevant source of information, which depending on the context or the semantics of the particular operator can be either direct or indirect and point to either perceptual, cognitive or reportative sources. What kind of information-source related meanings the establishment of a separate perspective time causes in the case of Mari particle constructions will be seen next.

4.2. The evidential contribution of perspective time in the Mari particle constructions

It was seen in Section 3 that the particle constructions encode a multiple perspective towards the described events. In expressions with temporal value of pastness, the event is observed from the event-internal perspective time and recounted from the event-external speech time. In language use, the employment of the multiple perspective particle constructions has several reasons. In Spets (2023) I discuss the functions of event-internal perspective time in narrative structuring, including for example focalization through a story-internal protagonist. I will repeat the examples (1a) and (4) as (8) and (9), respectively, for demonstration:

(8) Meadow Mari

tol-m-em	*γoδə̑m*	*Jə̑βan*	*ekzamen-lan*
come-VN-POSS1SG	during	Yyvan	exam-DAT
jamδə̑ lalt-eš	***ulmaš***.		
prepare-3SG	*ulmaš*		

‘When I came Yyvan was preparing for the exam (as I heard).’ (Riese, Bradley & Yefremova 2022: 223)

(9) Hill Mari

to-kə̑-na	*tol-ə̑n*	*šo-mə̑kə̑,*	*kečəβäl*
home-ILL-POSS1PL	come-CVB	arrive-CVB.PRI	noon
ertält-en	***ə̑l’ə̑***.		
pass-PST2.3SG	*ə̑l’ə̑*		

‘The noon had passed when I came home.’ (Krasnova et al. 2017: 134)

In both examples, the events are recounted from the time when the story-internal subject referent was in touch with the source that enables them to conclude the information, or in deictic terminology, when they were surrounded by a perceptual field that either included or excluded the event. In (8), *ulmaš* tells that at the time of arriving to the place the observer was in touch with indirect evidence about the event of preparing for the exam, in this case a report they heard. In (9), *ə̑l’ə̑* marks that at the time of coming home the speaker had visual connection to the fact that the noon had passed. This kind of reference to the story-internal processes of knowledge formation cannot be done with the simple past tenses, which only communicate about the temporal order or overlaps between events and leave open the question of who was aware of the facts told in the narration.

While the employment of the multiple perspective particle constructions in case of past events is rather straightforward, the situation on present stratum requires more attention. As argued in Spets (2025a) on evidentiality and Spets (2025b) on modality, the particle constructions preserve their multiple perspective nature also in cases where the temporal meaning is fully backgrounded. The division between two different vantage points is, then, not made between two temporal strata but between two locations in a non-temporal TAME dimension. The corpus examples (10) and (11) below illustrate this in the case of evidentially marked constructions with the indirect evidential particles *ulmaš* and *ə̑lə̑n*.

(10) Meadow Mari
marij ul-mə̑-m kə̑zə̑t tə̑γe rašemδ-at ***ulmaš****, už-at!*
Mari be-VN-ACC now like.this concretize-3PL *ulmaš* see-2SG
'You see, they are now concretizing their Mariness like this!' (Social media corpus)

(11) Hill Mari
βot Lenin maχań eδem ə̑l-eš! teχeń
well Lenin what-kind.of person be-3SG this.kind.of
jažo ə̑š-an eδem-žə svet-əštə-ž=ät uke
good mind-ADJ person-POSS3SG world-INE-POSS3SG=ADD EXIST.NEG
ə̑lə̑n*, βekät…*
ə̑lə̑n probably
'What a person is Lenin! There is probably no other such an intelligent person in the whole world…' (Belyaev 1982: 32)

The motivation to use the particle construction instead of simple tense forms with present value is the speaker's wish to highlight their personal connection to the evidence that allows them to conclude the information (cf. Spets 2025a: 188–190, 195).[4] The examples above are characterized by inferential source of information with mirative overtones in (10). In example (10), the particle marking emphasizes how the speaker is currently watching the behavior of the subject referents that enables an inference about them trying to concretize their ethnicity. In (11), the speaker is thinking about the acts of Lenin and based on them, he infers that no-one can be more intelligent. Same analysis goes for examples (2) and (3) in Section 1. In the inferential (2) the speaker does not know surely whether they are dreaming but infers so based on the evidence around them. In the mirative example (3), the speaker sees their friend awake but frames the event as if it is excluded from their perceptual field, because they had expected something else and it requires extra cognitive work to internalize the reality.

The multiple perspective structure of the utterances thus construes a reference to the speaker both as the physical producer of the utterance and as the cognitive formulator of the knowledge who is simultaneously

4 On the conversational level, the usage of the evidential particles serves as a strategy to (dis)claim so-called 'epistemic primacy' in the speech situation, i.e. speaker's (dis)ability to produce information relevant to the ongoing discourse. See Spets (2025a: 200–208) for Mari and e.g. Grzech (2020) on the topic in general.

in connection with the relevant type of information source.[5] In this sense, the particle marking exemplifies Johanson's (2000: 61) definition of evidentials as encoders of a "conscious subject" who is able to draw conclusions based on their cognitive experiences. The simple non-past tense lacks this kind of reference to the knowledge formation process and is thus an evidentially neutral form.

In terms of perspective structure, the particle constructions (unlike the simple non-past tense) make an overt reference to the perspective time as the evidential vantage point of the utterance. However, in utterances with present-tense semantics, the perspective time necessarily overlaps with the speech time. This is critical for the types of indirect information sources that can be addressed by the construction. As pointed out by Smirnova (2011: 284), an operator that construes the perspective time as a separate entity from the speech time may have evidential readings only if there is a suitable temporal order between the two coordinates. That is, if the speaker wishes to utter something about their evidence concerning the events, they must first acquire this evidence they speak about. Thus, the perspective time must by default temporally precede the speech time.

However, the example of Mari languages shows that different types of information sources can be more or less strict towards this requirement, meaning that they may also allow a temporal overlap between the two coordinates. Among the indirect sources, inference and mirativity behave like this. Representing cognitive stances towards knowledge, they express mental states and processes of the speaker induced by something they perceive. In both cases, the perception of the event can also be simultaneous with the speech time. This means that the speaker may be in sensory connection (visual, auditive etc.) with the evidence of the event at the same time as they are speaking about what they can infer based on this sensory information. Similarly, in mirative readings the speaker may simultaneously sense the surprising event and talk about feeling surprised.

This is not the case with reportative stance, which requires a temporal separation of the speech time and the perspective time. The time of hearing the original report must by rule precede, even shortly, the time

5 These statuses can be identified with the participant roles 'animator' and 'cognizer' defined by Goffman (1981) and Bergqvist (2018).

of forwarding the information. In other words, it is not possible for the speaker to simultaneously listen what someone else is telling them and re-tell this information to a third party. In the past stratum, however, the reportative meaning is possible for the construction with *ulmaš*/*ə̑lə̑n*, since the past-locating perspective time automatically precedes the present speech time.

I have demonstrated above how the evidential readings of the constructions with *ulmaš*/*ə̑lə̑n* are affected by the temporal structure of the utterances they occur in. In the next section, I will discuss the relevance of this observation for analyses of the Mari evidentiality more broadly.

5. Discussion: Event-level and propositional-level evidentials

Understanding evidentials as a type of deictics is supported by a large body of research pointing out the fact that the speech context affects the meanings of the elements (e.g. San Roque et al. 2017 on evidential perspective shift according to speech act type and Sun 2018 on the relation between information source and person, *inter alia* the so-called "first-person effect"). From another perspective, a given evidential (system) may either have an inherent semantic meaning or express information-source related meanings only as a by-product of the deictic structure of an utterance.

The semantic and deictic concepts of evidentiality are identical to what Faller (2003; 2004: 46–47, 80) calls 'propositional-level' (or 'illocutionary-level') and 'event-level evidentiality', respectively. As the name suggests, propositional-level evidentials operate *on* the proposition. They take the whole statement with its aspectual viewpoint and temporal content and define the speaker's information source towards it with their inherent evidential semantics. Faller (2004: 47, 82) calls this "evidentiality proper". In contrast, event-level evidentials operate *within* the proposition and on the event it describes, meaning that the evidential readings are bound to the properties of the event, such as its temporal location and structure. Studies on non-related languages show that tense-aspect operators that construe a perceptual field and define the speaker's position towards an event at a particular time represent this kind of evidentiality. As Chung (2007: 204) argues for tenses in Korean, those that establish a perceptual field are not evidentials as such but "provide a vantage point for evidentials". This means that the

tense construction may be filled with different kinds of morphemes that define the actual evidential reading. In Mari, this means the variation between *âl'e*/*âl'ə̑* and *ulmaš*/*âlân*. The schematic construction itself only marks that there is a spatiotemporal relation between the speaker and the event. The constructions are thus sensitive to tense and may eventually lose their ability to point to (certain types of) information-gaining processes when the temporal structure is modified. As seen, this is exactly what happens with the Mari *ulmaš*/*âlân*, meaning that typologically the particle constructions belong to the group of event-level evidentials.

The event-level semantics of the Mari particles are easy to understand if we remember their origin as tense-deictic elements and keep in mind the position of this kind of elements in scope hierarchies of TAME dimensions. When a single clause contains several TAME categories, they are ordered hierarchically so that the meanings situated higher on the scale affect the interpretation of those beneath them but not vice versa. The (simplified) scope hierarchy presented in (12) below follows Cinque (1999: 55) and Nuyts (2014: 48):

(12) Scope hierarchy of TAME dimensions
evidentiality > epistemic modality > **tense** > root modality > aspect

At the bottom of the hierarchy, we find aspect and root modality. They scope lower than tense, which means that tenses take a state of affairs with its internal temporal structure (aspect) and internal potentiality to activate (root modality) and locate it in a certain temporal interval. Thus, the past inchoative expression *Masha started studying* refers to an event that started in the past, not a past interval that started during the run time of the event. On the other hand, the tense itself belongs to the scope of epistemic modals and evidentials. In the expression *Apparently Masha started studying* the evidential assumption coded by the adverb takes place at the speech time, not at the temporal interval referred by the past tense. The Mari past-marked particles *âl'e*/*âl'ə̑* and *ulmaš*/*âlân* operate on the level of tense and cannot scope over the whole proposition. This explains why their evidential content is sensitive to the temporal interpretation of a clause. Interestingly, the capability to express event-level evidentiality instead of propositional evidentiality is mirrored in the fact that the particle constructions express event-level (root) modality instead of propositional-level

(epistemic) modality (see Spets 2025b). The division means that the particle constructions evaluate the realistic possibilities of an event to advance in time and reach its culmination in the surrounding circumstances, while they lack meanings related to the speaker's subjective view on probabilities and likelihood of the culmination (expressed for examples by auxiliaries like *might* in English). These kinds of essential parallels in the TAME behavior of the particles are missed, if we ignore their tense-deictic semantics.

When it comes to reportatives, they typically behave like propositional-level evidentials and do not share form with event-level ones (Chung 2007: 217). The difference is seen also in their origins, as reportatives usually arise from complement-taking illocutionary verbs (Aikhenvald 2004: 271–273), which do not care about the temporal structure of the events in their complement clauses. This is the case also in both Mari languages, which possess the particles *man(ə̑n)* and *maneš* 'reputedly' that are grammaticalized conjugation forms of the verb *manaš* 'to say'. Unlike *ulmaš*/*ə̑lə̑n* with context-dependent evidential semantics, these are proper reportatives that make a semantic reference to hearsay information in all temporal strata. Example (13) shows how the reportative particle may specify the evidential meaning of a present-tense clause:

(13) Meadow Mari

ak-še	*ńiγunam*	*o-k*	*βolo,*	***maneš***.
prize-POSS3SG	never	NEG-3SG	go.down.CNG	REP

'The prize [of gold] reputedly never goes down.' (Onchyko 2/1996: 69)

Thus, reported information as such is not incompatible with present tense semantics. It is incompatible with the structure of the Mari present tense constructions with *ulmaš*/*ə̑lə̑n* that inevitably pair the speech time and the perspective time.[6]

6 Faller (2003: 21–22, 31) utilizes also other criteria than scope of TAME categories to distinguish between propositional-level and event-level evidentiality in Cuzco Quechua. One example is the scope of negation where propositional-level evidentials do not belong to the scope while event-level ones do. This criterium seems to be irrelevant in Mari: the polarity of the clause is always expressed in the lexical verb, meaning that also the negative value of the utterance is shifted to past location by the particles. In other words, the Mari tense-deictic particles scope over negation and not vice versa.

Finally, it is worth noticing that same kind of tense-sensitive evidentials are found also in the contact languages of Mari. Morphosemantically similar analytic TAME constructions with two evidentially opposing 3rd person singular past tense forms of being-verbs characterize also other languages in the Volga region. The systemic counterparts of *ulmaš*/*ôlôn* in these languages seem to display the same kind of asymmetry between reportative readings in past and present stratum. Kubitsch (2022) and Saraheimo & Kubitsch (2023: 144–145) discuss the Udmurt indirective particle *vylem* in present contexts. In their examples, the particle only marks the speaker's conclusions based on what they see, while reportative instances are non-existent. Further, considering the local Turkic languages Tatar and Bashkir, the indirect particle *ikän* only expresses inference or mirativity (Burbiel 2018: 407–411; Greed 2018: 29). It is probable that this behavior is caused by similar effect of the temporal perspective structure allowing some indirect evidential values while disallowing others.[7]

7 To be precise, the situation in Tatar and Bashkir shows some complexity. These languages actually possess two morphologically distinct types of evidentially indirect particles originating from 3rd person singular past tense forms of old being-verbs with the stem **i*-. Besides *ikän*, we also find the particle *imeš*, which is a reportative element. (Burbiel 2018: 411–413; Greed 2018: 29.) The semantic difference can possibly be explained by language history. The suffix in the latter particle is a successor of the old participle *-mYš*, which was also used as a past tense marker in finite conjugation. In later stages of development *-mYš* became replaced by suffix *-GAn*, which is found in the former particle (Johanson 2018: 514). In modern languages, the occurrence of the old participle is sporadic, one notable exception being the fossilized particle *imeš* (Greed 2018: 29). Most likely, *imeš* has originally been used in the same kind of analytic past tense constructions as in Mari (see Levitskaya 1976: 69–70). However, I assume that the removal of the item from productive verbal constructions and the need to contrast its meaning to the competing *ikän* have blurred its semantics and enabled a transformation into an evidential with no perspective-based evidential restrictions. In addition, note that there are formally similar elements also in Chuvash, the third Turkic language of the Volga region. As pointed out by an anonymous reviewer, the particles *ikken* and *iměš* are probably borrowed from Tatar. In analytic past tense constructions in modern Chuvash, the 3rd person singular present perfect form *pulnă* of the being-verb is used. However, it is unclear to what extent these constructions possess evidentially indirect meanings (e.g. Savelyev 2020: 457). I am also not aware of whether *pulnă* occurs in expressions with present-tense reading and what is its possible evidential value in these contexts.

6. Conclusions

In this paper I have argued that the Meadow Mari and Hill Mari particles *ulmaš* and *ə̂lə̂n* do not have an inherent evidential meaning. Instead, their interpretations depend on the temporal perspective structure of the analytic constructions they occur in. The essential factor is the relationship between the speech time and the perspective time. Among the different indirect evidential meanings of the particles, inferential and mirative readings can be activated both in past-referring expressions where the perspective time precedes the speech time and in present ones where the two temporal coordinates overlap. In contrast, reportativity requires that perspective time must precede the speech time. Thus, only past expressions license the reportative reading. These results contribute to the ongoing discussion on the nature of Mari evidentiality and suggest that at least in the case of the particle constructions it is reasonable to abandon the propositional-level (non-)eye-witness-based terminology and apply an event-level analysis with the notion of perceptual field.

From a more typological point of view, this paper joins the chain of studies that show the exceptional status of reportatives among evidentials. Reportativity has been observed to be the most likely evidential value to develop a dedicated grammatical marker (Aikhenvald 2004: 23) and the only one, which allows denial of the evidential proposition by the same speaker (AnderBois 2014). Concerning event-level evidentials, this study partly verifies the assumptions of Chung (2007) on their low compatibility with reportative evidence compared to other sources of information but emphasizes the role of temporality in the analysis. The actual level of compatibility must be defined separately for each language given that event-level evidential constructions are not uniform in their morphology, syntax and TAME semantics.

The observations made in this paper can also shed light on the etymologies of event-level evidentials. Earlier, Faller (2004: 81) has suggested that the perceptual field semantics of certain Quechuan evidentials might be explained by their origin as spatial deictic pronouns. The Mari particles have not developed from spatial deictics but temporal ones; however, the perceptual-field based evidential analysis seems to work in similar manner. Thus, spatial and temporal deictics are both considerable candidates when investigating the yet unclear origins of perceptual-field sensitive evidentials.

In the end of the paper, I will mention a piece of work that I would like to see completed in typological studies on evidentiality. This is a cross-linguistics survey of binary evidential systems, especially those operating on catch-all categories of "direct" and/or "indirect" types of information sources. I assume that a much larger proportion of them than what is presently known might actually distinguish between observation positions instead of specific acts of gaining information. Given the fact that Uralic (as well as Turkic) grammatical evidential systems represent to a large extent this binary type, researchers working on these languages should have a lot to give for studies on deictically induced evidentiality.

Abbreviations

ACC – accusative; ADD – additive; ADJ – adjective derivation suffix; CNG – connegative; COMP – comparative (case); CVB – converb; CVB.PRI – converb of prior action; DAT – dative; EMPH – emphatic enclitic; EXIST.NEG – negative existential copula; ILL – illative; INE – inessive; LOC – locative; NEG – negative; PL – plural; POSS – possessive suffix; PST1 – simple past tense I; PST2 – simple past tense II; Q – question particle; REP – reportative particle; SG – singular; VN – verbal noun; 1 – first person; 2 – second person; 3 – third person.

Data

Arkhangelskiy, Timofey. 2019. Corpora of social media in minority Uralic languages. In *Proceedings of the Fifth International Workshop on Computational Linguistics for Uralic Languages*, 125–140. Tartu: Association for Computational Linguistics. https://www.aclweb.org/anthology/W19-0311.

Beljaev, Iosif. 1982. *Kreðälmäš.* (*Кредälмäш.*) Joškar-Ola: Kńiγäm lə̑kšə̑ marə̑ izdateľstvo. (Йощкар-Ола: Книгам лыкшы мары издательство.)

Egorkina, Elizaveta. 2012. *Əlä γəń šəðər šüməštet… Povesť ðon šajə̑štmašβlä.* (*Ӹлä гӹинь шӹiдӹир шӱмӹштет… Повесть дон шайыштмашвлä.*) Joškar-Ola: Marə̑ kńiγä izdateľstvo. (Йощкар-Ола: Мары книга издательство.)

Onchyko = Volumes 1996, 1997 and 2008 in the archive of journal Onchyko within the portal of Mari-Lab. Ончыко (PDF) — Mari-Lab.

Social media corpus = Corpus of Meadow Mari Social Media. The corpora of Uralic Volga–Kama languages. http://volgakama.web-corpora.net/index_en.html.

Tarjanov, Ivan I. (ed.). 1968. *Kâŕâk sirəštə. Povesť, lâðâšβlä, pjesəβlä, očork.* (*Кырык сирышты. Повесть, лыдышвлä, пьесывлä, очерк*.) Joškar-Ola: Kńiγäm lâkšə marə̂ izdateľstvo. (Йощкар-Ола: Книгам лыкшы мары издательство.)

Valka, Ondrin. 2007. *Ikänä Opanas. Masakβlä. Šajâštmašβlä. Monologβlä.* (*Икänä Опанас*. *Масаквлä. Шайыштмашвлä. Монологвлä.*) Joškar-Ola: Respublikanskij naučno-metodičeskij centr narodnogo tvorčestva i kulturno-dosygovoj dejatelnosti. (Йощкар-Ола: Республиканский научно-методический центр народного творчества и культурно-досуговый деятельности.)

References

Aikhenvald, Alexandra Y. 2004. *Evidentiality*. New York: Oxford University Press. https://doi.org/10.1093/oso/9780199263882.001.0001.

Alhoniemi, Alho. 1985. *Marin kielioppi*. (Apuneuvoja suomalais-ugrilaisten kielten opintoja varten X.) Helsinki: Suomalais-Ugrilainen Seura.

AnderBois, Scott. 2014. On the exceptional status of reportative evidentials. *Proceedings of SALT* 24. 234–254. https://doi.org/10.3765/salt.v24i0.2424.

Becker, Martin & Jakob Egetenmeyer. 2018. A prominence-based account of temporal discourse structure. *Lingua* 214. 28–58. https://doi.org/10.1016/j.lingua.2018.08.002.

Bergqvist, Henrik. 2018. Evidentiality as stance: Event types and speaker roles. In Ad Foolen, Helen de Hoop & Gijs Mulder (eds.), *Evidence for evidentiality*, 19–43. Amsterdam: John Benjamins. https://doi.org/10.1075/hcp.61.

Burbiel, Gustav. 2018. *Tatar grammar. A grammar of the contemporary Tatar literary language*. Stockholm–Moscow: Institute for Bible translation.

Chung, Kyung-Sook. 2007. Spatial deictic tense and evidentials in Korean. *Natural Language Semantics* 15. 187–219. https://doi.org/10.1007/s11050-007-9017-8.

Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. (Oxford studies in comparative syntax.) New York, Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780195115260.001.0001.

Comrie, Bernard. 1976. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.

Evans, Nicholas. 2005. View with a view: Towards a typology of multiple perspective constructions. *Annual Meeting of the Berkeley Linguistics Society* 31(1). 93–120. https://doi.org/10.3765/bls.v31i1.3429.

Faller, Martina. 2003. Propositional- and illocutionary-level evidentiality in Cuzco Quechua. In Jan Anderssen, Paula Menéndez-Benito & Adam Werle (eds.), *The Proceedings of SULA* 2. 19–33. Vancouver, BC: Graduate Linguistics Student Association, University of Massachusetts, Amherst. https://hdl.handle.net/20.500.14394/44108.

Faller, Martina. 2004. The deictic core of ‘non-experienced past’ in Cuzco Quechua. *Journal of Semantics* 21. 45–85. https://doi.org/10.1093/jos/21.1.45.

Goffman, Ervin. 1981. *Forms of talk*. Philadelphia: University of Pennsylvania Press.

Greed, Teija. 2018. The quotative in Bashkir. *Studia Orientalia Electronica* 6. 23–55. https://doi.org/10.23993/store.69685

Grzech, Karolina. 2020. Epistemic primacy, Common Ground management and epistemic perspective. In Henrik Bergqvist & Seppo Kittilä (eds.), *Evidentiality, egophoricity and engagement*. (Studies in Diversity Linguistics 30.), 23–60. Berlin, Language Science Press.

Johanson, Lars. 2000. Turkic indirectives. In Lars Johanson & Bo Utas (eds.), *Evidentials: Turkic, Iranian and neighboring languages*. (Empirical Approaches to Language Typology 24.), 61–88. Berlin, New York: Mouton de Gruyter. https://doi.org/10.1515/9783110805284.61

Johanson, Lars. 2018. Turkic Indirectivity. In Alexandra Y. Aikhenvald (ed.), *The Oxford handbook of evidentiality*, 510–524. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198759515.013.24.

Kamp, Hans. 2013. Deixis in discourse: Reichenbach on temporal reference. In Klaus von Heusinger & Alice Ter Meulen (eds.), *Meaning and the dynamics of interpretation* (Current Research in the Semantics/Pragmatics Interface 29), 105–159. Leiden: Brill. https://doi.org/10.1163/9789004252882_006.

Kamp, Hans & Uwe Reyle. 1993. *From discourse to logic: Introduction to model-theoretic semantics of natural language, formal logic and discourse representation theory*. Student Edition. Dordrecht – Boston – London: Kluwer Academic Publishers.

Krasnova, Nadezhda, Timothy Riese, Tatiana Yefremova & Jeremy Bradley. 2017. *Reading Hill Mari through Meadow Mari*. Vienna. www.mari-language.com.

Kubitsch, Rebeka. 2022. *The grammaticalization of the evidential 'be'-verb in Udmurt*. (Presentation on June 15th 2022). Syntax of Uralic languages 4.

Lee, Jungmee. 2011. The Korean evidential *-te*: A modal analysis. In O. Bonami & P. Cabredo Hofherr (eds.), *Empirical Issues in Syntax and Semantics* 8. 287–311.

Levitskaya L. S. 1976. *Istoričeskaja morfologija čuvašskogo jazyka*. Moskva: Nauka.

Mordashova D. D. 2023. Retrospektivnyj sdvig. In E. V. Kashkin, M.-E. A. Winkler, T. I. Davidyuk, V. V. Dyachkov, V. A. Ivanov, D. D. Mordashova, P. S. Pleshak & I. A. Khomchenkova. 2023. *Elementy gornomarijskogo jazyka v tipologičeskom osveščenij*, 336–349. Moskva: Buki Vedi.

Nuyts, Jan. 2014. Analyses of the modal meanings. In Jan Nuyts & Johan van der Auwera (eds.), *Oxford handbook of modality and mood*, 31–49. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199591435.013.1.

Oversteegen, Leonoor & Birgit Bekker. 2002. Computing perspective: Pluperfect in Dutch. *Linguistics* 40(1). 111–161. https://doi.org/10.1515/ling.2002.001.

Pallaskallio, Ritva. 2016. Absoluuttisuudesta relatiivisuuteen: Pluskvamperfektin diskursiiviset funktiot kertovissa teksteissä. *Virittäjä* 120(1). 84–121. https://journal.fi/virittaja/article/view/46457.

Pengitov, N. T, I. S. Galkin & N. I. Isanbaev. 1961. *Sovremennyj marijskij jazyk. Morfologija.* Joshkar-Ola: Marijskoe knizhnoe izdatelstvo.

Plungian, Vladimir A. & Johan van der Auwera. 2006. Towards a typology of discontinuous past marking. *Language Typology and Universals* 59(4). 317–349. https://doi.org/10.1524/stuf.2006.59.4.317.

Reichenbach, Hans. 1947. *Elements of symbolic logic*. London: Macmillan.
Riese, Timothy, Jeremy Bradley & Tatiana Yefremova. 2022. *Mari (marij jylme): An essential grammar for international learners.* Vienna: University of Vienna. www.mari-language.com.
San Roque, Lila, Simeon Floyd & Elisabeth Norcliffe. 2017. Evidentiality and interrogativity. *Lingua* 186–187. 120–143. https://doi.org/10.1016/j.lingua.2014.11.003.
Saraheimo, Mari & Rebeka Kubitsch. 2023. Discourse-interactional functions of Udmurt *val* and *vylem*. *Linguistica Uralica* LIX 2023(2). 130–153. https://dx.doi.org/10.3176/lu.2023.2.04.
Savelyev, Alexander. 2020. Chuvash and the Bulgharic languages. In Martine Robbeets & Alexander Savelyev (eds.), *The Oxford guide to the Transeurasian languages*, 446–464. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780198804628.003.0028.
Serebrennikov B. A.1960. *Kategorij vremeni i vida v finno-ugorskix jazykax permskoj i volzhkoj grupp*. Moskva: Izdatelstvo Akademii nauk SSSR.
Skribnik, Elena & Petar Kehayov. 2018. Evidentials in Uralic languages. In Alexandra Y. Aikhenvald (ed.), *The Oxford handbook of evidentiality,* 525–553. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198759515.013.25.
Smirnova, Anastasia. 2011. The meaning of the Bulgarian evidential and why it cannot express inferences about the future. *Proceedings of SALT* 21. 275–294.
Spets, Silja-Maija. 2023. Temporal perspective and its formal background. An explanation for aspectual synonymy between simple and analytic past tenses in Mari. *Journal de la Société Finno-Ougrienne* 99. 275–318. https://doi.org/10.33340/susa.123024.
Spets, Silja-Maija. 2025a. Epistemic perspective of temporal deictics. A study on Mari retrospectivizing particles. *Journal of Uralic Linguistics* 4(2). 179–216. https://doi.org/10.1075/jul.00041.spe.
Spets, Silja-Maija. 2025b. Encoding discontinuativity by Mari retrospectivizing particle constructions. *Finnisch-Ugrische Forschungen* 70. 173–210. https://doi.org/10.33339/fuf.147262.
Sun, Jackson T.-S. 2018. Evidentials and person. In Alexandra Y. Aikhenvald (ed.), *The Oxford handbook of evidentiality*, 47–64. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198759515.013.2.

Kokkuvõte. Silja-Maija Spets: Refereeritud evidentsiaalsus ja ajaperspektiiv: mari partiklite *ulmaš* ja *âlân* tähenduse kohta. Mari keeltes on olemas ajaliselt ambivalentne TAME-konstruktsioon, mis niidumari keeles sisaldab partikleid *âl'e* ja *ulmaš* ja mäemari keeles partikleid *âl'ə* ja *âlân*. Kahe partikli erinevus seisneb nende evidentsiaalsuses: *âl'e* ja *âl'ə* markeerivad otsest evidentsiaalsust, *ulmaš* ja *âlân* aga informatsiooni pärinemist kaudsest infoallikast. Viimaste evidentsiaalseid tähendusi mõjutab siiski lause ajaline tõlgendus: kui lause viitab minevikule, saavad *ulmaš* ja *âlân* väljendada nii järeldatud ja refereeritud evidentsiaalsust kui ka miratiivsust, olevikule viidates aga ei ole

refereeritud evidentsiaalsuse funktsioon võimalik. Käesolev artikkel seletab seda olukorda perspektiivaja ja tajuvälja mõistete abil ja illustreerib, kuidas partikkelkonstruktsioonide perspektiivstruktuur sobib refereeritud informatsiooniallika markeerimiseks ainult mineviku aja puhul. Tulemused toetavad väidet, et partiklid väljendavad evidentsiaalsust sündmuse tasandil (deiktiliselt), mitte propositsiooni tasandil (semantiliselt).

Märksõnad: temporaalsus, evidentsiaalsus, refereeritud evidentsiaalsus, perspektiivaeg, tajuväli, deiksis, mari keeled