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## Temporal perspective and its formal background: An explanation for aspectual synonymy between simple and analytic past tenses in Mari

This paper examines and explains the perspective-based aspectotemporal variation of the simple and analytic past tenses in Mari narration. At the current stage of research, the analytic past tenses are presented as aspectually synonymous with the simple past tense II, implying that there is no functional distinction between these morphologically very dissimilar operators. To overcome the apparent drawbacks of the purely aspectual approach, this paper breaks the tenses down into their morphosemantic ingredients and explains their exact functions by their form, thus shedding also new light on the development of the items. As will be shown, the reason for tense variation is the position of perspective time, a temporal vantage point from which an event is seen. The simple past tense II sets the perspective time outside of the story line, while the analytic tenses locate it inside the narrative world, which affects the temporal and non-temporal structure of the discourse. Crucially, the concept of perspective is inherently built into the structure of the tenses: the “auxiliary” of the analytic tenses is *de facto* a retrospectivizing particle developed for the temporal manipulation of events, and its application in anaphoric narration creates internal complexity for the story. The “pastness” of the simple past tense II, in contrast, is anaphoric by nature, which makes narrations structured with it perspectivally one-dimensional.

### 1. Introduction<sup>1</sup>

Meadow Mari and Hill Mari (hereinafter abbreviated as *MM* and *HM*, respectively) are two closely related Uralic languages spoken in the Volga Basin. Representing two standardized forms of a dialect continuum, Meadow Mari and Hill Mari share a reasonable amount of mutual intelligibility, with the main differences being found in phonology and lexicon (Saarinen 2022: 432; Kangasmaa-Minn 1998: 220), although some formal and functional dissimilarities are found also in morphology and morphosyntax (e.g. in negation and in the semantics of certain evidentiality-coding verb forms, see Beke 1911; Alhoniemi 1985; Kangasmaa-Minn 1998; Saarinen 2022; Spets 2022). Nevertheless, the topic of the current paper, the perspective time of tensed clauses, behaves functionally alike in both languages, and therefore Meadow Mari and Hill Mari will be discussed here side by side and referred to in general as *Mari*.

Mari is a tense language, where verbs conjugate according to the temporal location of an event on the time axis. The expression of external aspect, in contrast, is integrated into different tenses, which thus serve as portmanteau aspectotemporal

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1. I wish thank the two anonymous referees for their comments on the paper. Any remaining shortcomings are naturally my own responsibility.

operators.<sup>2</sup> The tense inventory of modern standard Mari includes the following seven tenses gathered in Table 1 with the affirmative paradigm of the 2nd person singular indicative of the verb MM *âštaš*, HM *âštäš* ‘to do’ and preliminary translations:

Tense names and abbreviations	Meadow Mari	Hill Mari	Translation
Non-past tense	<i>âštet</i>	<i>äštet</i>	‘you do; you are doing; you will do’
Simple past tense I (PST1)	<i>âštäšäč</i>	<i>äštäšäc</i>	‘you did’
Simple past tense II (PST2)	<i>âštenat</i>	<i>äštenät</i>	‘you have (apparently) done; you had done; you were doing; you used to do’
Analytic imperfect I (IMPFV1)	<i>âštet äle</i>	<i>äštet älä</i>	‘you were doing; you used to do’
Analytic imperfect II (IMPFV2)	<i>âštet ulmaš</i>	<i>äštet äläñ</i>	‘you were apparently doing; you apparently used to do’
Analytic pluperfect I (PLUP1)	<i>âštenat äle</i>	<i>äštenät älä</i>	‘you had done’
Analytic pluperfect II (PLUP2)	<i>âštenat ulmaš</i>	<i>äštenät äläñ</i>	‘you had apparently done’

Table 1. The Mari tense inventory<sup>3</sup>

Six of the seven Mari tenses refer to events in the past, in addition to the fact that the PST2 expresses also presentness in perfect function. Of the past tenses, two are morphologically simple ones, while the four analytic tenses are combinations of finite-conjugated simple tense forms and elements MM *äle*, *ulmaš*; HM *älä*, *äläñ*. The latter are formally 3rd person singular forms of the verbs MM *ulaš*, HM *älaš* ‘to be’

2. Besides paradigmatic, external aspect marking, Mari possesses a highly developed system of internal aspect marking by means of converb constructions. The two aspect systems are situated at different levels of the language and can freely combine in the same predicate. An exhaustive survey of aspectual converb constructions is found in Bradley (2016).

3. The tense names used in this paper are a pragmatic combination of those employed in descriptive grammars. The modifier “analytic” (as a counterpart of *liitto-* ‘compound’ used in Alhoniemi 1985) overtly emphasizes the crucial compound nature of the tenses in question. In the case of the analytic pluperfects, the term “pluperfect” (*предпроедуйе* and *предпроедуйуй* as in SMYa 1961; MY 1985; and Savatkova 2002) captures the explicit pastness of the tense, a property lacking in the “compound perfect” (*liittoperfektii*) of Alhoniemi (1985). Finally, a simple, unambiguous name *non-past tense* is used here instead of the traditional names “present tense” or “present-future tense”.

conjugated in PST1 and PST2 respectively (see Section 3 for a more detailed analysis on the structure of the tenses). The variation between *ǎle* and *ulmaš* or *ǎlǎ* and *ǎlan* does not affect the aspectual reading of the combination but depends on the evidential and mirative perspective of the clause: IMPFV1 and PLUP1 express the direct source of information, while IMPFV2 and PLUP2 are associated with types of inference and hearsay as well as mental unpreparedness towards the information (Skribnik & Kehayov 2018: 536–539; Bradley et al. 2022: 922). However, as briefly suggested later on in this paper, there is reason to expect that the elements in PST1 are actually evidentially neutral rather than marked directives.

When it comes to the aspectual functions of the past tenses, the apparent synonymy between the different tenses is striking: the functions of the analytic imperfects (commonly abbreviated as IMPFV) and analytic pluperfects (commonly PLUP) are not distinguished from those characteristic for PST2. This will be illustrated below with examples from the literature.

Firstly, IMPFV are explained as giving an imperfective viewpoint to events. They express “long-lasting, uncompleted past events that are not restricted to a certain temporal interval” (SMYa 1961: 191–193; Savatkova 2002: 204–205), “events that occur simultaneously with some other past event” (MY 1985: 49–51), or “events being continuous or repetitive” (Alhoniemi 1985: 121–122). Examples from the literature on tense use are given below:

- (1)<sup>4</sup> MM Мый таче тудын дек мийышым. Тудо ала-могай поэмым лудеш ыле.<sup>5</sup>  
*mâj taće tudâ-n dek mijâ-š-âm. tudo ala-moġaj*  
 1SG today 3SG-GEN to go-PST1-1SG 3SG INDEF-what.kind.of  
*poem-âm lud-eš ǎle<sup>6</sup>.*  
 poem-ACC read-3SG ǎle  
 ‘Today I went to his place. He was reading some kind of poem.’  
 (Alhoniemi 1985: 121)

- (2) MM Тудын капка ончылныжо эксыде имне-влак шогат ыле.  
*tudâ-n kapka ončâl-nâ-žo eksâde imne-βlak*  
 3SG-GEN gate front-LOC-POSS.3SG constantly horse-PL  
*šoġ-at ǎle.*  
 stand-3PL ǎle  
 ‘There were constantly horses standing in front of his gate.’ (SMYa 1961: 191)

4. In the examples, the verb form in focus is set in bold. Dialogue examples are distinguished from narrative ones by means of a dash before the example. The abbreviations MM and HM show the language of the example.

5. I have written the examples also in Cyrillic in the cases where the original source uses transcription. The Finno-Ugric transcription is followed in the examples.

6. For highlighting the relevant parts in the morphosemantics of the analytic tenses, the forms will be glossed semi-morphologically: the lexical verbs are divided into morphemes, while the elements MM *ǎle*, *ulmaš*; HM *ǎlǎ*, *ǎlan* are glossed as themselves, being still overtly distinguished in the structure.

Problematically, very similar descriptions are used for the PST2, including “longevity and simultaneity” (MY 1985: 47–48), “habituality” (Golosov & Kozlov 2018: 160), as well as “correspondence with the Russian imperfective aspect” (SMYa 1961: 189). This kind of usage is illustrated in the following examples from literature with highly equal meanings compared to IMPFV:

(3) НМ Изергин имни вуй гач йыжген валыш. Кым якшар салтак толмыкат, Изергин тәрвәнбиде киэн.

*Izergin imni buj gač jâžγ-en balâ-š. kâm*  
 Izergin horse head via fall-CONV descend-PST1.3SG three  
*jakšar saltak tol-mâk=at, Izergin tärvänä-de*  
 red soldier come-CONV.PRI=ADD Izergin move-CONV.NEG  
***ki-en.***

lie-PST2.3SG

‘Izergin fell over the horse’s head. When the three red soldiers came, Izergin was laying still.’ (Alhoniemi 1985: 121)

(4) НМ Мä перви шим момоцаш пыреннä.

*mä pervi šim momoca-š pâr-en-nü.*  
 1PL earlier black sauna-ILL enter-PST2-1PL

‘Earlier we used to bathe in a smoke sauna.’ (Golosov & Kozlov 2018: 160)

Additionally, as will be seen (and explained) in the next sections, also PST1 has sporadic usage as an imperfective tense.

Hence, the analytic tense IMPFV seems to not be distinguishable from the simple tenses. A similar situation prevails in the descriptions of PLUP. It is explained as a perfect operator in the past stratum, “marking a past event that took place before another past event” (SMYa 1961: 194–197; MY 1985: 52–55; Alhoniemi 1985: 122). This is illustrated by the examples below

(5) ММ Самоварым шуктен, үстел йыр шинчыныт ыле – капка почылтмо йүк шоктыш.

*samovar-âm šukt-en, üstel jâr šinč-ân-ât âl'e*  
 samovar-ACC fill-CONV table around sit.down-PST2-3PL âl'e  
 – *kapka počâlt-mo jük šoktâ-š.*  
 gate open-PRTC.PASS sound be.heard-PST1.3SG

‘Having filled the samovar, they had sat around the table when a sound of the gate opening was heard.’ (MY 1985: 53)

(6) HM МЫНЬ ИКÄНÄ ТЕХЕНЬ ШАЯМ КОЛЫНАМ ЫЛЫЫ.

*məñ ikänä texeñ šaja-m kol-än-am ä'lä.*

1SG once this.kind.of story-ACC hear-PST2-1SG ä'lä

'I had once heard this kind of story.' (Alhoniemi 1985: 122)

However, as it turns out, the PST2 has a similar viewpoint value in the past (Serebrennikov 1960: 166),<sup>7</sup> as seen from example (7):

(7) MM Бочкышто вўд дене локтылалтше порох ыле: тудо оранек нўрен да чоткыдемын.

*bočkâ-što büd dene loktälalt-še poroχ ä'le:*

tub-INE water with go.bad-PRTC.ACT gunpowder be.PST1.3SG<sup>8</sup>

*tudo orañek nőr-en da čotkâdem-än.*

3SG fully get.wet-PST2.3SG and harden-PST2.3SG

'In the tub there was gunpowder spoiled in the water: it had gotten totally wet and hardened.' (Serebrennikov 1960: 166)

The earlier descriptions make it hard to predict the choice between the simple and analytic tenses. Nevertheless, given the rarity of full synonymy between grammatical operators morphologically so dissimilar, one would expect a division of labor between the forms. Since an explanation based on semantic aspect categories (such as "progressivity" and "habituality" or "resultative perfect" and "experimental perfect") seems to fail in the full detection of the underlying cause for variation, a non-aspectual one must be found instead.

In this paper, I set forth that the concept of perspective time is a key factor in distinguishing the functions of simple and analytic past tenses in narration. Since both IMPFV and PLUP behave similarly with respect to the temporal perspective, I assume that they include a certain formal element in their morphosemantic structure that affects the view of the event described, and that the simple past tenses lack the element of this type. The task of the current study is thus twofold: to describe, on the one hand, the yet poorly studied structure and development of the past tenses, and on the other hand to illustrate how the formally inbuilt notion of perspective time distinguishes the functions of the aspectually synonymous simple and analytic past tenses.

This said, Section 2 will start the paper by presenting the data used in both parts of the study. The first part of the discussion is then handled in Section 3, which analyzes the morphosemantic structure and the diachronic development of the Mari past tenses. This formal background will distinguish the aspectually synonymous contexts

7. Serebrennikov (1960: 166) describes how the usage of narrative PST2 in past perfect function presents a past result as if it was seen synchronically from within the event. This, as will be seen, does not mean same as perspective shift in narration, but is rather an indication of the general temporal neutrality found in anaphoric environments (see Section 3).

8. When not part of an analytic tense combination, the elements MM *ä'le*, *ulmaš*; HM *ä'lä*, *ä'län* are glossed according to their actual meaning as 3rd person singular past tense forms of verb 'to be'.

from the ones where the different tenses give a different view of the structure of the event. After this distinction has been made, Section 4 presents the concepts of narrative structuring and perspective time as tools for explaining the non-aspectual tense variation. The second part of the discussion is then found in Sections 5 and 6, where the aspectual synonymy and the role of perspective time is treated from several points of view. Section 5 presents the concept of perspective time in the temporal structuring of narrative segments, while Section 6 explains how it can be applied beyond temporality to create narrative polyphony. Finally, concluding remarks and some topics for further research are found in Section 7.

## 2. Data

The data of this research consists of 59 texts of fictive genres. 22 of the texts are written in Meadow Mari and 37 in Hill Mari, and they represent altogether 29 different writers. Two of the Meadow Mari texts (Onchyko 12/1996: 26–60 and Onchyko 6/1996: 66–78) are originally translations from Russian. The Hill Mari data includes one young-adult novel as well as short stories published in story collections, while the Meadow Mari texts are short stories and essayistic texts published in the volumes of year 1996 of the literary magazine *Ончыко* (Onchyko). The Meadow Mari data does not contain all the texts of the given volumes but is limited to those included in the Onchyko corpus of the Research Unit for Volgaic Languages at the University of Turku. This enabled analyzing the texts with the corpus analysis tool AntConc. However, the references after the corpus examples address to the printed volumes, which are available online as PDF-files.

From this data, I have gathered altogether 778 examples with past tenses, of which 446 represent imperfective viewpoint, while past perfect function is illustrated in 332 examples. Despite the greater number of Hill Mari texts in the data, the number of Hill Mari examples is lower than that of Meadow Mari, since the Hill Mari data is considerably smaller, consisting of 4,769 lines on printed pages, while the Meadow Mari data amounts to 12,834 lines. The number of Hill Mari examples is 216 (27.8% of the total), and that of Meadow Mari examples is 562 (72.2%).

The examples of simple past tenses have been gathered manually. In the case of the longest texts in the Meadow Mari data, I have examined only the first half of the text, which decreases the relational number of simple past tenses in the whole sample. In the search for the analytic tenses, in contrast, search tools have also been used to collect examples from a larger text mass. Thus, the number of analytic tenses is relatively larger than it would be in a non-manipulated sample, and the data cannot be used as quantitative evidence on the frequency of different tenses in Mari texts.

The profile of the examples is shown in the tables below. Table 2 presents the number and percentage of examples in the past imperfective function. As will be seen later, telicity is a major factor for the choice of imperfective tense, which is why the occurrences are classified according to the telicity of the events they mark.

Tense	Number of occurrences	Number and percentage of telic occurrences	Number and percentage of atelic occurrences
IMPFV	108	54 (50.0%)	54 (50.0%)
PST2	304	2 (0.7%)	302 (99.3%)
PST1	34	0 (0.0 %)	34 (100.0 %)

Table 2. Past tenses in imperfective function

Table 3, in turn, shows the number of past perfect examples and their distribution according to discourse genre, a factor whose relevance for the tense choice will likewise be discussed.

Tense	Number of occurrences	Number and percentage of occurrences in narration	Number and percentage of occurrences in dialogue
PLUP	153	104 (70.0%)	49 (30.0%)
PST2	179	179 (100.0%)	0 (0.0%)

Table 3. Past tenses in perfect function

Since this paper concentrates on time-related variation between the simple and analytic tense, the occurrences of IMPFV and PLUP include examples of only IMPFV1 and PLUP1, leaving the evidentially and miratively marked forms aside. This is justifiable inasmuch as the simple past tenses in their past imperfective and perfect readings have no evidentially indirect or mirative overtones (see subsections 3.1 and 4.2), and the variation based on the information source and related issues is thus attested only within the paradigm of analytic tenses. Further, the two simple past tense paradigms of the verb MM *ulaš*, HM *âlaš* ‘to be’ are intermingled and contain also suppletive forms of the verb *lijaš* ‘to become’ in Meadow Mari (Krasnova et al. 2017: 178), which is why the simple past tense occurrences of these verbs do not represent their typical aspect values and thus have not been included in the sample (see also subsection 3.1).

### 3. The structure, development, and aspectual properties of Mari tenses

This section gives an overview of the Mari tense inventory by presenting the morphosemantic structure and development of the tenses and specifying their aspectual properties. The discussion starts with simple tenses in subsection 3.1 and continues with analytic tenses in subsection 3.2. Attention will be paid especially to the development of PST2 as well as the division between those functions of the IMPFV and PLUP that differ from PST2 aspectually and those that do not.



### 3.1. Simple tenses

The **non-past tense** is morphologically the unmarked member of the tense paradigm (Bereczki 2002: 82–84). Functionally, it covers both present and future temporal strata, and the actual temporal location of the event is to be inferred both from the presence of temporal adverbs and the internal aspect of the event. When no lexically coded location is available, punctual telic verbs take completed future meanings as a rule, while atelic verbs are interpreted as referring to uncompleted, progressively seen events usually in the present stratum. The intermediate category of durative telicity, in turn, is in simplified terms ambiguous, allowing both present-imperfective and future-perfective readings depending on context. (Compare to PST2 presented below and Comrie 1976: 66–7; see also examples in Serebrennikov 1960: 155–157; SMYa 1961: 181–182; and MY 1985: 41–42.) Examples with both future-perfective and present-imperfective are given in (8) and (9) respectively:

(8) ММ – Уке, лучше мый ойлем.

*uke, lučē māj ojl-em.*  
no better 1SG speak-1SG

‘– No, it is better that I will say this.’ (Serebrennikov 1960: 157)

(9) НМ Мä кымытын колым äнгб̄рен шб̄нзенä.

*mä kāmät|än kol-äm ängər-en šanz-enä.*  
1PL three|ADV fish-ACC angle-CONV sit-1PL

‘The three of us are angling for fish.’ (Alhoniemi 1985: 120)

However, the imperfective reading in the functions of “general”, “repeating”, or “scheduled” events (Serebrennikov 1960: 156; SMYa 1961: 182; MY 1985: 41) is possible also for telic verbs, as in example (10):

(10) ММ Шыже эрта, теле толеш, шошо эрта, кенеж толеш.

*šäže ert-a, tele tol-eš, šošo ert-a,*  
autumn pass.by-3SG winter come-3SG spring pass.by-3SG  
*keņež tol-eš.*  
summer come-3SG

‘Autumn passes and winter comes, spring passes and summer comes.’

(MY 1985: 41)

Thus, the Mari non-past tense is a general operator for all kinds of imperfective viewpoints in the present stratum. This kind of functional combination is typologically rather common (Bybee et al. 1994: 140–141, 151–153; de Haan 2010: 5) and characteristic also for non-past tenses in other Uralic languages (see e.g. VISK §1543 for Finnish). Furthermore, the non-past tense can also be used as a *praesens historicum* in narration (Serebrennikov 1960: 155), but this function is not discussed here.



**PST1** consists of the Proto-Uralic past tense markers *\*-j* and *\*-s* depending on the conjugation, but the *\*-j* of the first conjugation is nowadays visible only in the form of palatalization of the dental stem consonants [l] and [n] (Galkin 1964: 129–133; Bereczki 2002: 88). Functionally, this tense is explained as an evidentially direct perfective tense marking “completed” and “rapidly occurring” events, as well as events that took place in the near past. It is also the main propulsive (plot-advancing) tense marking events that take place one after another (SMYa 1961: 184–185, 188–189; Alhoniemi 1985: 121; MY 1985: 45; Golosov & Kozlov 2018: 158–163). Example (11) illustrates the usage:

(11) ММ Ик гана шылын куржашат төчышна да ышна керт: чодыраш мален колтымына годым миен кучышт.

*ik* *ɣana* *šəl-ən* *kurž-aš=at* ***töčə-š-na*** *da*  
 one time escape-CONV run-INF=ADD try-PST1-1PL and  
***ə-š-na*** *kert:* *čodəra-š* *mal-en* *koltə-mə-na*  
 NEG-PST1-1PL can.CNG forest-ILL sleep-CONV send-PRTC.PASS-POSS.1PL  
*ɣodəm* *mij-en* ***kučə-š-t***  
 during go-CONV catch-PST1-3PL  
 ‘Once we tried to escape but we did not succeed: they caught us when we were sleeping in the forest.’ (SMYa 1961: 184)

Nevertheless, PST1 has also occasional functions of the imperfective type. Clauses with the copula verb ММ *ulaš*, НМ *əlaš* ‘to be’, which normally express imperfective viewpoint, employ very often PST1 (as seen for instance in example (7) in the introduction).<sup>9</sup> In addition, my data offers a few examples of imperfective usage of PST1 with other verbs as well, as demonstrated in the progressive example (12):

(12) НМ Квартира амасам тйдѳлѳн яратымы ѳрвезыжѳи пачы. Маша тйдѳн гѳц нѳжѳлгѳлыкым вычыш, но тидѳн вѳреш кукшынак пелештымым веле колы: —.

*kvartira* *amasa-m* *tədə-län* *jaratə-mə* *əβezə-žə* *pač-ə*.  
 apartment door-ACC 3SG-DAT love-PRTC.PASS boy-POSS.3SG open-PST1.3SG  
*Maša* *tədə-n* *ɣəc* *nəžəɣələk-əm* ***βəčə-š***, *no* *tidə-n*  
 Masha 3SG-GEN from tenderness-ACC wait-PST1.3SG but this-GEN  
*βäreš* *kukšə|n-rak* *peleštə-mə-m* *βele* *kolə:* —.  
 instead.of dry|ADV-COMP say-PRTC.PASS-ACC only hear.PST1.3SG  
 ‘Her boyfriend opened the apartment’s door to her. Masha was waiting for tenderness, but instead of that, she only heard dry words saying: —.’  
 (Egorkina: 35)

9. Note however that both the PST1 and PST2 forms of the Meadow Mari verb *ulaš* are formally irregular.

However, all the attested occasions represent only five atelic verbs: MM *šinčáš* ‘to sit’, MM *šoγaš* ‘to stand’, HM *kiäš* ‘to lie’, HM (*ma*)*šanaš* ‘to think’, and HM *βāčāš* ‘to wait’. As can be inferred from the unproductivity of imperfective PST1, this kind of usage is an archaic feature, and the modern perfective usage of the operator is a rather new restriction (see the next passage on PST2). Earlier, the aspectual reading of PST1 was most likely dependent on the internal aspect of the clause, so that bare telic events got perfective readings while atelic events were associated with imperfective viewpoint. This is still the situation with the successors of the old simple past tense in most Uralic languages (see examples in e.g. GSUYa 1962: 203 for Udmurt and VISK §1531 for Finnish).

**PST2** is a simple tense only synchronically. Diachronically, it is a combination of the lexical verb conjugated in the non-finite form with the suffix *-n*, and a copular auxiliary on the personally conjugated non-past tense of the verb MM *ulaš*, HM *ālaš* ‘to be’ (Galkin 1964: 133–135; Bereczki 2002: 90–93). The form in *-n* occurs as a converb in modern Mari, but earlier it also had participial usage (Isanbaev 1961: 61–62). In the Hill Mari PST2 paradigm, the item is nowadays restricted only to positive forms, while the negation of the tense occurs with the suffix *-de*, the marker of the negative converb (Bereczki 2002: 92–93).

As was seen, the tense is aspectually ambivalent, expressing both the perfect and imperfective viewpoint. Furthermore, similar multifunctionality is found also in its temporal content: in the perfect meaning, PST2 covers both the present and past stratum (SMYa 1961: 186–187; Serebrennikov 1960: 166), while in the latter it always gets the past reading. The present perfectness is illustrated in example (13) (the other functions were demonstrated in Section 1):

(13) MM Пушенге-влак ужаргеныт. Кенез толын.

*pušeŋge-βlak užary-en-āt. keŋež tol-ān.*  
tree-PL turn.green-PST2-3PL summer come-PST2.3SG

‘The trees have turned green. Summer has come.’ (Alhoniemi 1985: 121)

The development of this functional manifoldness has not been discussed before, even though the diachronic background is helpful in explaining the range of uses of the tense. The following paragraphs will thus concentrate on this topic.

To start with, the kind of rather unusual aspectual polysemy with both perfect and imperfective functions (at least in a system as large and aspectually detailed as in Mari) is to be derived from the morphosemantic background of the tense. Like all diachronically uncombined items in the Mari non-finite system, the non-finite *-n* is aspectotemporally ambiguous between the past-perfect and present-imperfective readings (Shagal 2018: 74–75 on participles; Bartens 1979: 144–146 and Alhoniemi 1985: 142–143 on converbs). Thus, any operator built on the corresponding non-finite elements ends up being aspectually multifunctional. This is also the case with forms built on the suffix *-n*. It has (had) lexical aspectual division, where verb phrases with a telic referent lead to a perfect reading, while those allowing atelic readings are

open for both perfect and imperfective interpretations (Danilova 2022). This is seen in Table 2 from the distribution of the imperfective PST2 in telic and atelic contexts: the tense is strongly restricted to atelic events.<sup>10</sup>

The morphosemantic structure of the form for both perfect and imperfective readings will now be presented in (14) (S stands for the subject):

(14) **The morphosemantic structure of Mari PST2**

PST2 (Perfect):	‘S is an X-done one’ → ‘S has done X’ / ‘S had done X’
PST2 (Imperfective)	‘S is an X-doing one’ → ‘(*S is doing X / *S does X) / S was doing X / S used to do X’

I shall leave aside the question of whether the suffix *-n* formed the finite tense in the participial or the converbal stage, and turn to the facts of the developmental history of PST2 which are relevant for explaining the aspectual and temporal functions of the modern tense. Firstly, the perfect meaning can be said to have been the primary one to achieve, while the imperfective function arose as a “mechanical” byproduct of the morphological polysemy.<sup>11</sup> This can be seen from the incapability of the form to express the imperfective viewpoint without the accompaniment of a suitable lexical aspect of the verb phrase, and it is likely that this kind of form has no strong inherent potential to grammaticalize into a frequently used operator (Spets 2022). This makes the PST2 different from “independent” aspect operators, which create meanings as

10. Table 2 shows that imperfective reading of PST2 is present in two telic verb phrases in the data. However, in both cases the referent of the bare verb of the clauses lacks an inherent endpoint, and the telicity is coded by its arguments, as by the delimitative illative case in the following example with the verb *kaštaš* ‘to wander’:

HM – Магазиныш каштынам. Дä теवेश... Почтальонка пуэн колтыш.  
*magazin-äš kašt-än-am. ää teveš... počtal'onka pu-en koltä-š.*  
 shop-ILL wander-PST2-1SG and here mail.carrier give-CONV send-PST1.3SG  
 ‘– I was going to the shop. And here you go... The mail carrier gave me this [letter].’ (KS: 109)

In this example, the PST2 morphology operates primarily with the internal aspect content of the bare verb lexeme and only secondarily with the whole telicity-modifying verb phrase. This kind of extra-lexical telicity forms a gray area, where the functions of the imperfective tenses overlap. Moreover, I consider the telic verb phrase *momocaš päraš* ‘to go into the sauna’ in example (4) as a lexicalization for the atelic concept of ‘bathing in the sauna’.

11. Contact-based diachronic evidence also supports this claim: PST2 is explained as a code-copy from the perfect operators of the Turkic languages of the Volga–Kama area (Bereczki 2002: 91–92). However, all these operators are based on aspectually unambiguous perfect participles (Levitskaya 1976: 73–74) or perfect converbs (Johanson 1995: 317, 335–337). The imperfective Mari PST2 can thus be seen as a result of asymmetric code-copying in a non-finite system that is crucially dissimilar from those in the model languages (Spets 2022).

combinations of the external operator content and the internal lexical content (Breu 1994; Bickel 1997). An example of such an operator is the English progressive. Its core meaning, the ongoingness of a single event during a certain temporal interval, gets different alloemes with different events: unmarked simultaneity with dynamic, atelic events (*was reading*), interruption with telic events (*was falling down*), and temporariness with stative events (*was being nice*) (Bertinetto et al. 2000: 533; Johanson 2000: 152–154). The function of Mari PST2, in contrast, is not semantically modified but aspectually restricted, which mirrors the lack of an independent component of imperfectivity. In the field of perfectness, conversely, PST2 is able to express different perfect phenomena with no lexical restrictions.

As far as the temporal function of the tense is concerned, the PST2 is characterized by a formal illogic: the tense allows past time reference despite its present morphology. For the imperfective alloeme, this is indeed the only temporal stratum available. The lack of present time reference in the imperfective function is natural, again given the fact that the PST2 is not an imperfective operator in its own right but rather an accompaniment to the internal atelicity of the verb phrase,<sup>12</sup> which is why the form could not compete against the imperfectively more multifunctional non-past tense in the present stratum. More of interest is thus the acceptance of PST2 in past reference. As Table 3 for the perfect PST2 shows, the past function of the tense does not actualize in all contexts whatsoever, but rather is dependent on the discourse genre: it is linked specifically to narration, not to dialogue. This has to do with the structure of the discourses.

The main difference between the two discourse genres is the role of the speaker and their deictic location. Dialogue is deictic by nature, relating events primarily to the location of the speaker. Narration, in contrast, is anaphoric, which means that the discourse context serves the temporal location of an event. In other words, the events are related to each other inside a story line told by a narrator outside of it (Caenepeel & Moens 1994: 12–17; Binnick 2006: 259–260). Unlike dialogue, narration is functionally a complex structure consisting of a propulsive foreground and a stative background (Labov 1972; Hopper 1979). In this division, the foreground is characterized by plot-advancement and usually marked by subsequent perfective operators (PST1 in Mari), while the background serves descriptive, supplementary information on its anaphorically found foreground and employs typically imperfective and perfect operators (Johanson 2000: 43). Because the progressive, linear nature of narrations

12. The data indeed contains examples where the usage of PST2 seems to be motivated solely by the atelicity of a verb lexeme, as in the following example, where the verb *koštaš* ‘to wander’ occurs in a row of subsequential completed events and could be marked by the perfective PST1 as well as the two other (telic) verbs:

MM – Мӱнгыштӱ кодшыым. Шукыракат коштынам. Мӱнгӱ пӱртылым – –.  
*möŋgö-štö kodš-š-am. šukä-rak=at košt-än-am. möŋgö pörtäläm – –.*  
 home-INE leave-PST1-1SG a.lot-COMP=ADD wander-PST2-1SG home.ILL return.PST1.1SG  
 ‘– I left her home. I wandered for a long time. I returned home.’ (Onchyko 10/1996: 93–94)

(as defined in Hopper & Thompson 1980) makes the narrative background hierarchically subordinated to the foreground (Becker & Egetenmeyer 2018: 53), the formal contradiction between the past function and the present form does not inhibit the use of PST2, as long as the anaphoric foreground marked by PST1 is explicitly past. Thus, I assume that the past functions of PST2 originally developed in anaphoric narration, which also enabled the preservation of the imperfective alloseme. Furthermore, as will be seen, the overtly past analytic tenses serve for specific narrative purposes and thus cannot be used as general backgrounders in narration.

However, the development described above has also had further consequences for the range of uses of the imperfective PST2. The overt marking of narrative foreground and background restricted the PST1 to a fully perfective tense that presents events as completed. Thus, while the imperfective PST2 likely started as an atelic counterpart of PST1 in narrative structuring, the full perfectivization of the latter made it possible to abstract the past imperfective usage of PST2 in modern Mari also to non-anaphoric dialogue in the case of certain atelic events. These include stative events as well as iterative atelic events, which are uncompleted by definition.

Stative events usually refer to the permanent properties of non-agentive subject referents, and thus cannot naturally be presented as completed. Instead, their pairing with perfectivity-associating operators leads to a semantically marked inchoative reading (as seen from the stative verb *kertaš* ‘to be able’ in example (11) above, which gets an alloseme ‘to succeed’ with PST1). Therefore, PST2 is nowadays the aspectual default tense of past stative events, as seen in the dialogue example (15)

(15) ММ – Религий мыланемат кўлын – –.

*religij m̂lanem=at küł-âñ.*

religion 1SG.DAT=ADD be.needed-PST2.3SG

‘– I also needed religion.’ (Onchyko 4/1996: 10)

The second type of non-anaphoric PST2 in the past imperfective function concerns the dynamic atelic events of the iterative type. The PST2 is widely attested in contexts which express repetition of events, as is also IMPFV. However, as seen from (14), PST2 by its structure presents events as stative (‘be an X-doing one’), which, unlike with IMPFV, makes the iterative readings possible only in the presence of overt repetition-coding adverb phrases. These include distributive phrases like ‘every X’ or ‘always when X’, as well as period adverbs like ‘at that time’. Dynamic atelic events usually refer to hobby-like activities (a fact also seen from the Vendlerian (Vendler 1967) name for this event category), and combined with the former kinds of adjuncts they cause an interpretation of iteration. Examples of iterative PST2 are given below. In (16), the stative event of ‘being a writing-one’ is accommodated in the intervals coded by the adverb phrase *jâδ jâδe* ‘every night’:

- (16) HM Тыменьмѣ годшылаок йѣд йѣде стихвлѣм Сима лѣмеш сиренѣм – –.  
*t̄meñ-mə*      *ɣodš̄-la=ok*    *j̄d̄*    *j̄de*    *stix-βlā-m*    *Sima*  
 study-PRTC.PASS    time-PL=ENC    night    every    poem-PL-ACC    Sima  
*l̄m-eš*      ***sir-en-äm*** – –.  
 name-LAT    write-PST2-1SG  
 ‘During my student years, I used to write poems in the name of Sima every  
 night...’ (KSYT: 87)

Example (4) in the Introduction represents also this kind of structure.

Example (17), in turn, illustrates the stative nature of the PST2 especially well. Here the modal adverb *č̄ñž̄mak* ‘certainly’ presents the harrowing as a potentiality of the subject referent and thus diminishes the importance of single subevents:

- (17) MM – Тунам икшыве-влак чынжымак кугыен семынак – – тырмалашат  
 коштыныт – –.  
*tunam*      *ikš̄âβe-βlak*    *č̄ñž̄m=ak*    *kuȳj̄eŋ*    *sem̄n=ak*  
 at.that.time    child-PL    certainly=ENC    adult    like=ENC  
*t̄rma-l-aš=at*      ***košt-ân-ât***.  
 harrow-INF=ADD    wander-PST2-3PL  
 ‘– At that time the children certainly also took part in harrowing like adults.’  
 (Onchyko 4/1996: 7)

As will be seen below, the IMPFV has an opposite effect.

Considering all that has been said, by its nature the past alloeme of PST2 is originally an anaphoric, context-dependent one. Later on, the imperfective alloeme started to serve as an aspectual counterpart for the perfective PST1. These are also the reasons why I will refer to PST2 as a simple tense and not an analytic one: it has started to be more than the sum of its parts (unlike the actual analytic tenses presented below).

Lastly, the present perfect function of the PST2 has also evolved into a marker of evidential indirectivity and mirativity (Skribnik & Kehayov 2018: 537). Furthermore, along with a typologically common path of perfects turning into perfectives (e.g. Bybee et al. 1994: 81–87), the Mari PST2 is also commonly attested as a perfective operator replacing PST1 (Bradley et al. 2022: 921).

### 3.2. Analytic tenses

As already mentioned, analytic tenses are combinations of two finite elements, namely forms conjugated in the simple tenses and past forms of the 3rd person singular of the verb MM *ulaš*, HM *âlaš* ‘to be’. Because of their meaning, the latter will be referred to as ‘was’-elements. The IMPFV and PLUP are distinguished by the form of the lexical verb: IMPFV included a person-conjugated non-past tense (NPT in the schema below), while PLUP employs forms of PST2. The expressions are thus “built on two subsequent

predications”, as Kangasmaa-Minn (1998: 238) put it: a clause, which is marked by a tense of present stratum as if the location of the speaker was identical with the time interval of the event, and a (reduced) juxtapositional clause in the past tense, which then relocates the event to the past of the utterance time (cf. Kangasmaa-Minn 1998: 238).<sup>13</sup> This leads to the past imperfective function for IMPFV and past perfectness (pluperfectness) for PLUP. Based on this kind of structure, the semantical texture of utterances with combined tenses is thus as follows in (18):

(18) **Semantic structure of Mari analytic past tenses**

- IMPFV: S ([NPT: is doing X / usually does X] + [it **was** like this])  
 ‘It was like this (at certain time interval): S is doing X / usually does X’  
 → ‘S was doing X / used to do X’
- PLUP: S ([PST2: has done X] + [it **was** like this])  
 ‘It was like this (at certain time interval): S has done X’  
 → ‘S had done X’

A crucial point for the coming discussion about the perspective-based operator variation concerns the nature of the ‘was’-element. In the literature, no consensus has been found regarding how to define it. A majority of researchers label it as an “auxiliary” (*вспомогательный глагол* in Serebrennikov 1960: 170–173; SMYa 1961: 190–195; and Savatkova 2002: 204–207; *auxiliary* in Kangasmaa-Minn 1998: 238 and Saarinen 2022: 448; *segédige* in Bereczki 2002: 94), while a syntactically different statement is made by the terms “particle” (*частица* as in MY 1985: 48–54 and Serebrennikov 1960: 146) and “particle-resembling auxiliary” (*partikkelinomainen apuverbi* as in Bartens 2000: 214–215 for both Permic and Mari). From a functional point of view, a term “retrospectivizing marker” (*ретроспективизирующий показатель* as in Golosov & Kozlov 2018: 161) has been used. Lastly, some presentations abstain from classifying the items in question and refer to them iconically as “3rd person singular preterite forms of the verbs of ‘being’” (Beke 1911: 357) or “*ǎle/ulmaš* past tense forms” (Alhoniemi 1985: 112).

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13. This kind of syntactic structure of analytic tense–aspect operators is cross-linguistically significantly less common than a subordinate structure with non-finite forms combined with finite ones. However, the structure is somewhat widely attested in the Turkic languages in the Volga–Kama area and beyond (e.g. Levitskaya 1976: 69–70) and present also in the Permic languages Udmurt and Komi as well as Old Hungarian, which makes it a code-copy in Turkic-influenced Uralic languages (Bartens 2000: 214–215; Bereczki 2002: 93–98; Kiss 2013). The precise number of juxtapositional analytic tenses varies from language to language; unlike Mari, Upper Chuvash, and Udmurt allow, for example, the simple past tense forms of the lexical verb. The syntactic structure, however, is the same in every language. Despite the shared formal background, attempts towards a comparative functional analysis are not found in this paper due to the insufficiency of the descriptions of the narrative tense usage in the languages in question.



In this paper, the term *retrospectivizing particle* is chosen, which I consider best captures the syntax and semantics of the ‘was’-element. Firstly, the term *particle* highlights the syntactically loose nature of the elements from the other finite form, a feature not captured by the term *auxiliary*, which refers to syntactic dependency between the two verbal components. Secondly, the notion of “retrospectivization”, as introduced with the morphosemantic term *retrospective shift marker* by Plungian (2001), Sichinava (2001), and Plungian & van der Auwera (2006: 344–345), describes the primary function of the Mari items: to shift a non-past marked event to its actual temporal location, which is past from the origo of the discourse, the speaker. The primary task of the retrospectivizing particle to modify *temporal locations* also explains why the non-past tense and the PST2 lose some of their semantic properties during the process of retrospectivization; there are namely neither the past prospective combination FUTURE + ‘was’ nor evidentially or miratively marked INDIRECT + ‘was’ among those of PLUP. The question is about the hierarchy between the scopes of different TAME dimensions, where epistemicity and evidentiality are typically ranked higher than temporal assessments, meaning that the former have scope over the whole statement, while the temporal dimension affects only the grammatical level concerning the time-related structure of a state of affairs (such as aspect), which can be located on the time axis (Nuyts 2014: 48; Aikhenvald 2004: 96). The scope hierarchy (Nuyts 2014: 48, modification my own) is presented below in (19):

### (19) Scope hierarchy of different TAME dimensions

epistemic modality / evidentiality > time > aspect > state of affairs

The process of retrospectivization occurs in the level of “time”, which means that the phenomena to the left of it do not belong to the scope of “shifted” properties. This is also in line with the observation that the primary motivation for temporal manipulation is indeed the need to operate with the *aspect* values of the non-past tenses also in the past stratum (see below on the functions). On the other hand, the modal phenomena that are related to time are subordinated to the retrospectivization. Thus, while both future and imperfectivity are modal categories in a sense that the former refers to irrealis events (Comrie 1985: 43–47) and the latter operates with the possibility of continuation of an ongoing event (Ferreira 2016: 365–371; see also Krifka et al. 1995 and Boneh & Doron 2008 for actualization of habitual subevents), they have a crucial difference. Future events are yet non-realized, while imperfectivity evaluates the possibilities of an event with already existing subparts. In accordance with the scope hierarchy, the Mari particle is able to cooperate with this kind of “event-centered

modality” (this term is taken from Arregui et al. 2014: 314–315, 358): it moves to past an actual event, not an assumption of an event.<sup>14</sup>

In the end, let us note for the sake of practicality that when there is an intention to express indirect information source or mental unpreparedness, the combination of PLUP2 with a formally indirect particle must be used, as in (20) with a reportative origin for the information:

- (20) ММ Пале лие: Миклай ўдыр таҗе Малинина Роза почеш толын улмаш.  
*pale lij-e: Miklaj üðâr taŋ-že Malinina*  
 known become-PST1.3SG Miklaj girl friend-POSS.3SG Malinina  
*Roza počëš tol-ân ulmaš.*  
 Roza along come-PST2.3SG ulmaš  
 ‘We came to know: Miklaj had come along with his girlfriend Roza Malinina.’  
 (Onchyko 4/1996: 77)

Typically, the temporal structure of past perfect operators enables their employment in, for example, referative functions, where they relay the speech of someone else as heard by the protagonist (see e.g. Lund 2015: 64–68; Pallaskallio 2016: 103–109). However, as we have seen, the Mari tense structure handles quotations as an evidential value separated from the temporal layering of the discourse and outsources their expression to the conjugation of the particle.

Turning now to the temporal functions of the analytic tenses, retrospectivization is not the main strategy for expressing pastness (as can be inferred from the existence of morphological past tenses), but there are special reasons for this. These special reasons can be divided into two types. The first of them concerns the cases where the retrospectivization of an aspect operator is a strategy to overcome the viewpoint restrictions related to the simple past tenses. As stated, both PST1 and PST2 can be called imperfective operators only with atelic events. However, the imperfectively more permissible non-past tense is possible also with imperfective readings of telic verbs, which means that the shift of a clause in the non-past tense by the retrospectivizing particle makes it possible to have imperfective readings for telic events also in the past stratum. This leads for example to an “interruptive” interpretation, as in example (21), or to habituality, as in example (22):

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14. Areal parallels for the anti-future observation can be found in the Volga–Kama area. In the Udmurt paradigm of analytic tenses, the so-called “frequentative past” is based on an old non-past (present-future) tense, which later on lost its present reading and became a future, along with the rise of a new, derivational present tense (Bartens 2000: 189). This modern future-based analytic tense form has now practically disappeared and ceded its functions to the combination based on the current present tense (Saraheimo 2018). Similarly, in Chuvash the so-called “speculative future” is the only tense the ‘was’-element does not combine with.

(21) ММ Вараже йыгыжтарен шуктен. Роза, «Эй, йөрдымө!» манешат, коран кая ыле.

*βara-že jəγəžtar-en šukt-en. Roza 'ej, jörδəmö!'*  
 then-POSS.3SG harass-CONV reach-PST2.3SG Roza oh inappropriate  
*man-eš=at, koraŋ kaj-a â'e.*  
 say-3SG=ADD move.CONV go-3SG â'e

‘Later on, he had worn her out with his harassment. “Oh, this is inappropriate!” Roza said and was turning away. [But as known, she was prevented by the man.]’ (Onchyko 4/1996: 99)

(22) ММ Кермыч пудыргым, түрлө торым погкалаш мемнамат ик-кок шагатлан луктыт ыле.

*kermâč pudəryğ-m, türlö tor-əm poγkal-aš memnam=at*  
 brick shard-ACC another rubbish-ACC gather-INF 1PL.ACC=ADD  
*ik-kok šaγat-lan lukt-ât â'e.*  
 one-two hour-DAT lead-3PL â'e

‘They used to make also us gather brick shards and other rubbish for some hours.’ (Onchyko 4/1996: 66)

Habituality with dynamic atelic events, in contrast, is available also for PST2, but as we have seen, there is an aspectual difference between the two tenses. The PST2 stativizes the events, but IMPFV refers overtly to the existence of separate dynamic subevents also without overt iterative adverbs, as in example (23):

(23) ММ – Шарнет чай, кузе тушто йүштылына ыле?

*šarn-et čaj, kuze tušto jüštäl-âna â'e?*  
 remember-2SG maybe how there swim-1PL â'e

‘– Maybe you remember how we used to swim there?’ (Onchyko 6/1996: 23)

This kind of usage explains also example (2) in Section 1. The restricted subevents of the example are overtly denoted by the adverb *eksâde* ‘constantly’, which in this case expresses that there was no empty interval between the subevents.

Another form-based reason that requires analytic tenses is the past perfectness marking in dialogue. It was stated earlier that PST2 is possible in past perfectness in narrative genres alongside PST1, where the anaphoric context serves to locate the event in time. In dialogue, no such anaphoric support is available, and PLUP must be used, as in example (24):

(24) НМ – – – мѣньѣмъ весъ пѣшѣ выча, халашты бѣлѣшѣ пѣлѣмѣ бѣрвезѣвлѣ  
 вадеш токѣм толаш линѣт. Нѣнѣ доно имештѣ лагерѣштѣ иквѣреш каненнѣ  
 былы.

*məŋ-əm βes pəšə βəč-a, χala-štə ələ-šə pələ-mə*  
 1SG-ACC another work wait-3SG town-INE live-PRTC.ACT know-PRTC.PASS  
*ərβezə-βlə βad-eš tok-em tol-aš li-n-ət. nənə*  
 boy-PL evening-LAT to-POSS.1SG come-INF become-PST2-3PL 3PL  
*δono imeštə lager-əštə ikβərəš kün-en-nä əlʔə*  
 with last.year camp-INE together rest-PST2-1PL əlʔə  
 ‘– Another task awaits me: friends of mine, who live in town, promised to  
 visit me. I had spent a holiday with them last year in a camp.’ (Egorkina: 26)

The example above serves as good evidence for the effect of discourse genre on the interpretation of PST2: even the presence of an overtly past temporal adverb *imeštə* ‘last year’ does not enable a past reading of PST2 because of its deictic nature. The deicticity of the utterance implies a speaker, according to whose location the events are seen. This triggers the non-anaphoric present alloeme of PST2, and present perfect due to the fact that its task of relating events to the location of the speaker is incapable of co-occurring with specific temporal expressions that detach the event from this deictic observation point (Comrie 1976: 53–54; 1985: 124–125).

In the usages described above, the application of the retrospectivizing particle functions as a temporal strategy with the aspectual properties of the present tenses simply equipped with a temporal past component. More complex is its usage in anaphoric narration, where the anaphoric PST2 could do, and the formally past analytic tenses are functionally marked. The rest of this paper will explain this markedness in terms of temporal perspective.

#### 4. Temporal structure and temporal perspective

This section consists of two parts. Subsection 4.1 discusses linear temporal structuring and presents the ways by which events are situated on time axis and related to each other. Subsection 4.2 then concentrates on the non-temporal concept of perspective time and its role in hierarchical temporal structuring.

##### 4.1. Time points in temporal structuring

The basic object for temporal and aspectual operators is *event*, a state of affair prevailing in the world and expanding in time. An event has a concrete location at a certain time interval, and languages with grammaticalized tense and/or aspect expression include information on this location in their conjugation paradigms, where every member gives the event different temporal coordinates. These kinds of coordinates

have been described by various point models,<sup>15</sup> for example by Reichenbach (1947), Klein (1994), and Discourse Representation Theory (DRT) (introduced *inter alia* in Kamp & Reyle 1993; Kamp et al. 2011; and Kamp 2019). To put it simply, ignoring the differences in terminological details, there is a consensus that the following three notions are essential for locating the events on the time axis:

**Utterance time** is the time when the speaker produces the sentence, or the time where the narrator of a story or report is supposed to produce it. It coincides with the temporal location of the current speaker and is thus a context-based, deictic concept.

**Event time** is the temporal duration of the event from its beginning to its end. Unlike the other temporal coordinates, event time is an absolute interval of a salient referent, and thus can be referred to lexically by verb phrases. In other words, the event time is more a referent for verbs than for aspectotemporal operators. Event time can be specified overtly by temporal adverbs, like *from 2 p.m. to 2.30 p.m.*, but usually it remains only contextually inferred. Operators may be marked for the relationship between event time and utterance time, and this relationship gives the deictic location of the event: present tenses set event time at utterance time, past tenses before it, and future tenses after it.

**Reference time** is a temporal anchor that locates an event on the time axis. It does not give the actual *location time* (which in contrast can be given by lexical items like *yesterday* or *at 12 o'clock*) but a relational one found with respect to the contextual benchmark, or the *discourse referent*. The relationship between reference time and event time corresponds with that of external aspect: operators setting the event time inside the reference time lead to perfective reading, those establishing an opposite relation cause imperfective reading, and those positioning the reference time after event time evoke a perfect reading.<sup>16</sup>

Reference time can be found in two ways. In the case of anaphoric, verbal locating conducted by aspect operators, perfective items typically introduce a new reference time for the story line, while imperfective and perfect items maintain the interval presented by their discourse referents. Subsequent perfectly marked events thus create an interpretation of advancing plot, while non-perfective items stop the movement and give sights to the stative background. In lexical, adverbial locating by temporal specifiers, the reference time is accommodated in the slot defined by the adverb. Furthermore, I do not consider story lines as limited in the sense that they have a defined start and an end, but rather as indefinite and freely conceptualized series, which can be verbalized starting from any subinterval. Hence, also the discourse-initial events, which seem “contextless” (Kamp & Reyle 1993: 529), can be understood to have a location in a pragmatically defined reference time in the

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15. Different point modelings have been employed a few times in earlier research on Mari aspectotemporal operators (Moisio 1993; Golosov & Kozlov 2018), but not from the perspective of analytic tenses.

16. I follow Johanson (2000) in understanding *perfectness* (or *post-terminality* in his terminology) as a viewpoint value of similar naturalness as perfectivity and imperfectivity. This is an intuitive inclusion but contrasts with both traditional aspect literature like Smith (1991) and point models like DRT.

spirit of Partee (1973), who exemplifies the role of contextual environment in finding the locating interval for uttered events: if no anaphoric background is available, the events are to be accommodated in the suitable interval nearest to the utterance time (a similar interpretation concerns also calendar adverbs like *in April*, Kamp & Reyle 1993: 615).<sup>17</sup>

The referents presented above participate in the “linear ordering” of a discourse, distributing events chronologically on the time axis (Becker 2021: 274). However, as was seen in the Introduction, the several imperfective and perfect tenses in Mari are identical based on their relationships to the utterance time, event time, and reference time. As multiple cross-linguistic observations on operator variation show (e.g. Oversteegen & Bekker 2002; Lund 2015; Pallaskallio 2016; Becker 2021), a certain interval can be referred to by several operators, and the formal marking must thus have an extra-temporal or extra-aspectual base. A need for a fourth temporal coordinate has thus been recognized in the literature.

DRT as a theory on inter-clausal referential relations in discourse has presented this kind of concept. Since temporal operators primarily mark deictic relations between language user and their environment, and deixis by nature is a phenomenon of perspective, the referential relations between tensed clauses can be explained by a component that refers to the observer and their viewpoint. This is called **perspective time**, and its nature is discussed below.

## 4.2. Perspective time in temporal structuring and beyond

Perspective time (henceforth abbreviated as *PT*) refers to a time “from which the given information is seen” (Kamp 2013: 116). Perspective as a concept is situated in a level above the simple temporal location and does not organize the discourse based on “physically” measurable variables but rather by subjectively defined relevancy. In other words, PT is not a linear category by nature but a hierarchical one, which means that when the speaker makes a vantage point from a certain temporal interval, it becomes contextually more important than the other intervals, and gets a special role in discourse structuring. This effect of PT is described by the concept of *prominence*, as defined in the “tense in discourse” framework by Becker & Egetenmeyer (2018).

Since the PT does not include any independent temporal content, it must be located at some of the temporal benchmarks presented above. By default, the uttered information is observed from the perspective of the speaker, and their temporal location thus serves as the PT-locating perspectival origo of the discourse (Becker & Egetenmeyer 2018: 29). For past utterances, this means that the speaker and their perspective are situated outside the event or the story line of several events. Operators with this kind of coordinates are referred to as having no distinct PT.

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17. The context-pragmatic reference times indeed seem to be quite prominent discourse referents, as seen from the fact that Mari tends to highlight them with tenses setting distinct perspective times (see the next subsection and subsection 5.1.).

However, the utterance time is not the only option for the PT to be situated in. Consider the following French and English narrative sequences (a) and (b):

(a) *Il se dirigea vers elles. Quelques minutes plus tard, il **entra** chez le menuisier. – – La porte se referma sur lui et il attendit.*

‘He headed.PFV in that direction. Several minutes later, he **entered**.IMPFV the carpenter’s workshop. The door closed.PFV behind him and he started waiting.PFV.’ (Becker & Egetenmeyer 2018: 50, shortening and translational modification my own)

(b) *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, shortening my own)

In example (a), there is an advancing plot of four subsequential completed events. However, only three of them are marked by the expected perfective operator (*passé simple*, underlined), and one demonstrates less obvious imperfective marking (*imparfait*, set in bold). Example (b), in turn, presents a reverse temporal ordering by means of the perfect operator (*pluperfect*, set in bold) contrasting with the perfective one (*simple past*, underlined). However, according to a solely linear explanation, sequence (b) is temporally identical with sequence (c) below, which bypasses the use of the pluperfect by lexical ordering:

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

The explanation for tense choice lies in the position of the PT and the structural choices made by the narrator. In (a), the sentence with the imperfective marking contains a temporal adverb ‘after a few minutes’, which detaches the event from the straight narrative line of anaphorically set reference times and introduces a lexical location instead. The French “narrative imperfect” is a semantically marked tense in its perfective-like function and causes a tone of unexpected rapidness (Pollak 1960: 145–151). This means that instead of the utterance time, it is the adverbially coded reference time of the clause that accommodates the PT. The event of entering the workshop is thus seen from the perspective of a vantage point inside the story line, and the event time is related not only to the chronology but also to this adverbially coded time slot (Becker & Egetenmeyer 2018: 49–50). The reference time here serves as a temporal milestone, where the speed of the topical event is measured and commented on, and the imperfective morphology is justified by the inclusion relationship between this salient vantage point and the ongoing event observed from it. Thus, the meaning of the *imparfait* clause above is approximately ‘After a few minutes he was already entering the carpenter’s workshop’, and the temporally commenting adverbial reference time has contextual prominence being hierarchically higher than the anaphorically set reference times (Becker & Egetenmeyer 2018: 50). This kind of temporal organization



with narrative differences between time intervals represents the so-called *absolute* usage of PT (Pallaskallio 2016: 93–95).

Text-internal PT is present also in example (b), though not in an identical manner. Here the pluperfectly marked events are observed not so much from the deictic origo of the narrator, but rather from a secondary, story-internal perspective that mirrors the retrospective thinking process of Fred on his morning. The pluperfect sets the reference time to the interval, where Fred evaluates his advancing with the activities (Becker & Egetenmeyer 2018: 51). In the classification of Paducheva (1992), this kind of a view is called *synchronic observation*, as it forwards a view from the experiencer in the reference time. A similar protagonist-based viewpoint is not possible with example (c), which does not relate the whole anterior story line to the location of Fred, but retains the voice of the external narrator. This is called *retrospective observation* made after the reference time of the events (Paducheva 1992). The contextual prominence related to PT is thus given to the mental act of awareness, and the PT marks the experiencer, who is quoted in the discourse, and the perspectivization goes beyond simple temporal ordering (Becker & Egetenmeyer 2018: 35, 51–52). This represents the *relative* usage of PT (Pallaskallio 2016: 93–95), where the perspective serves as the “anthropocentric component” of the structure (Paducheva 1992), marking the active observer in the story world and replacing the voice of an impersonal external narrator (Oversteegen & Bekker 2002: 137).

The existence of a distinct PT of a tensed utterance can be contextual or inherent. The French *imparfait* does not always denote a prominent reference time in the narrative foreground, and the usage described above is a discourse-pragmatic strategy that arises in cooperation with temporal adverbs in propulsive sequences (Grønn 2008: 156–161). Pluperfect operators, in contrast, are by nature very likely to introduce a distinct PT due to their temporal structure, where all the three linear coordinates are situated apart from each other. This makes pluperfects in general suitable for complex narrative organization, quotations, and evidential references (e.g. Comrie 1976: 106–110; Pallaskallio 2016: 90). The anthropocentric component of the tense is further seen by its rhetoric relation in discourse: as stated by Lee (2017: 83), the most common function of the pluperfect in English narrations is to serve as an explanatory background for the narrative foreground, and “explanation” as a discourse relation, in turn, is highly dependent on a conscious mind who evaluates the logic between events (cf. Asher & Lascarides 2003: 159–162).

Turning to Mari in the next sections, we can see that the presence or absence of the retrospectivizing particle is a formal cause for the existence of a distinct PT in both an absolute and relative sense. Since the deictic present tenses (as part of the IMPFV and PLUP combinations) set the PT at the synchronic utterance time, which is simultaneously also the reference time, the analytic tenses morphosemantically possess the kind of relation between the coordinates that is needed for the hierarchical structuring. The shift to the past with the retrospectivizing particle then relocates this perspective apparatus overtly inside the story world and enables us to recognize the distinct levels of internal and external structuring. The formally non-past PST2,

contrariwise, keeps the PT at the utterance time, as it does in the present stratum, and has no ability for complex leveling of perspectives. This is also why the past perfect PST2 lacks the evidential content characteristic for its present usage: the position of the PT in past narration leads to an omniscient story-external viewpoint and the lack of evidential evaluation of observations. Similarly, IMPFV and PLUP of the “direct” type are primarily not used for manifesting a direct information source, which is why they can be thought of as evidentially neutral and thus only aspectotemporally distinguishable from PST2.

## 5. Perspective time and temporal structuring

This section illustrates how the presence or absence of a distinct PT functions as a strategy for temporal structuring in Mari. Because of the different discourse functions of imperfective and perfect operators, the narrative consequences of the PT are also somewhat different for IMPFV and PLUP, which are thus discussed mostly in separate subsections (as later on also in Section 6). The first subsection 5.1 shows how PLUP has the ability to set the PT at contextual reference time for hierarchizing relations between temporal intervals for different narrative purposes. It will also be seen how the pragmatically defined discourse-initial reference time is associated with analytic tenses. Subsection 5.2, in turn, focuses on the aspectual modification of events by PLUP and IMPFV and its temporal and narrative functions.

### 5.1. Prominence in narrative organization

In an unmarked Mari narration, the plot-advancing function is restricted to PST1, and the pluperfect tenses PST2 and PLUP are used for marking events anterior to their discourse referents. However, the data also contains examples where the PLUP (and only PLUP) is not used to code the reversed temporal order of events but straight ones. Consider example (25):

(25) НМ Вaлышыла шайыштмашем пакыла сирāш сōренāм ылыы, но тетрадемжб̄им пароходеш монден коденāм. Ёнде угыц сирāш веле шаненāм ылыы, почтальон м̄б̄лāнем сирмāшб̄им кандыш.

*βalā-šāla*            *šajāštmaš-em*    *pakāla*    *sir-āš*            *sōr-en-ām*  
 descend-CONV.SIM    story-POSS.1SG    forward    write-INF    promise-PST2-1SG  
*āl'ā*, *no*    *tetrad'em-ž-am*                            *paroxod-eš*    *mond-en*  
 āl'ā    but    notebook-POSS.1SG-POSS.3SG-ACC    ship-LAT            forget-CONV  
*koδ-en-ām*.    *ānde*    *uγac*    *sir-āš*            *βele*    *šan-en-ām*    *āl'ā*,  
 leave-PST2-1SG    now    again    write-INF    only    think-PST2-1SG    āl'ā  
*počtal'on*    *mālānem*    *sirēmāš-am*    *kandā-š*.  
 postman    1SG.DAT    letter-ACC            bring-PST1.3SG

‘When I descended [from the ship], I had promised to continue writing the story but I had forgotten my notebook on the ship. Now I had again thought about writing, when the postman brought me a letter.’ (KSYT: 89)

Here the events marked by PLUP are in iconic order in the storyline (descended > **promised** > **thought** > brought), and PST1 would in principle create a similar linearity of the events. However, the backgrounding properties of the PLUP modify the rhythm of the sequence. Since perfect operators describe the stative results of events, the employment of PLUP slows down the pace of the narration and creates solid vantage points inside the story line (Becker 2021: 284). In the example above, the reference times of the pluperfectly seen events (the time of descending from the ship and the subsequent interval verbalized by the adverb ‘now’) serve as observation points, where the narrator introduces the protagonist’s plans to continue writing his story but which are framed as narrative background in order to later contrast them with the interruptions marked by simple past tenses. Pallaskallio (2016: 102) describes this kind of usage of pluperfect operators as a highlighting tool for expressing temporal transitions in the plot structure, which in terms of prominence means that the PT-accommodating interval is seen as a pragmatically important part of the plot. In the example in question, the narrator finds it relevant to emphasize the transitions between making plans and failing to fulfill them, and the PLUP is used for making this logical change visible and comparing the prominences between several temporal intervals. This kind of promoting of explicit story-internal reference times is not possible with PST2 due to its anaphoric nature: the data does not provide examples of past perfect PST2 with lexically coded non-anaphoric reference times,<sup>18</sup> which highlights the temporal dependency of the tense from its foreground. Subsequent clauses in PST1, in contrast, would make the story homogeneous by its tempo without slowing vantage points. While PST1 is thus a primary narrative tense with independent ability to move the plot, PLUP can be called a secondary narrative tense, which has a functionally marked capacity to advance a story. The hierarchy between the different narrative items is based on the still relative nature of the latter tense: the occurrences of the narrative PLUP in the data are supported by overt temporal adjuncts that detach them from the monotonous anaphoric line (cf. Becker 2021: 284, 294).

Another case of narrative PLUP is found in example (26):

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18. Lexically coded anaphoric reference times, in contrast, are possible, exemplified for instance by the demonstrative-based adverb *tâmarte* ‘until that’ in example (44), where it refers to the time of the preceding discourse referent.

(26) ММ Александр Степанович – – 70 ияш юбилейжым – – палемдыш. Юбилейыш мыйымат ўжын ыле, но каен шым керт, а саламлыман телеграммым колтышым. Юбилейже деч вара Йошкар-Олаш толын ыле, вашлийна, ятыр жап кутырен шогышна.

*Aleksandr Stepanovič 70 ij|aš jubilej-žâ-m palemδâ-š.*  
 Alexander Stepanovich 70 year|ADJ party-POSS.3SG-ACC plan-PST1.3SG  
*jubilejâ-š mâj-âm=at üž-ân âle, no kaj-en šâm*  
 party-ILL 1SG-ACC=ADD invite-PST2.3SG âle but go-CONV NEG.PST1.1SG  
*kert, a salamlâm|an telegramm-âm koltâ-š-âm.*  
 can-CNG but congratulate|ADJ telefax-ACC send-PST1-1SG  
*jubilej-že deč bara Joškar-Ola-š tol-ân âle,*  
 party-POSS.3SG from then Yoshkar-Ola-ILL come-PST2.3SG âle  
*βašlij-na, jatâr žap kutâr-en šoγâ-š-na.*  
 meet-PST1.1PL a.lot time talk-CONV stand-PST1-1PL  
 ‘Alexander Stepanovich organized a party for his 70th birthday. He had also invited me to the party, but I could not go. Instead, I sent a congratulatory telefax. After the party, he had come to Yoshkar-Ola. We met and talked for a long time. (Onchyko 6/1996: 142)

The event of coming to Yoshkar-Ola is seen from the perspective of the time after the birthday party, which is earlier described as an instance where the two protagonists’ plans to meet were not fulfilled. The PT at the adverbially located reference time highlights the change in the events and turns the protagonists into a new kind of story world, where the meeting can finally happen. The PLUP points out the narrative border, where the focus transits from one part of the story to another (cf. Pallaskallio 2016: 100), and the tense alternation between primary and secondary narrative tenses creates a perspectival “landscape” (Becker 2021: 281), where prominent reference times distinguish the sub-sequences of the story line. For reference, a similar structuring was visible also in example (5) in the Introduction.

Furthermore, the analytic tenses are common in discourse-initial positions, as at the beginning of stories or new chapters. While this fact mirrors the anaphoric nature of PST2, which is restricted to mid-discourse, it is also an example of the quality of the pragmatically defined reference times: they are naturally prominent, since they locate the narrator’s choice on what is a relevant interval to start the story line with. The discourse-initial utterances may lack overt temporal locators, as in example (27) with IMPFV, or they may contain one as in (28) with PLUP:

(27) НМ Петя дон Света школыш кеӑш йӑмдӑлӑлтӑт ылыы.  
*Peta don Sveta škol-âš ke-äš jâmdâlält-at âlâ.*  
 Petya and Sveta school-ILL go-INF prepare-3PL âlâ  
 ‘Petya and Sveta were preparing to go to school.’ (Egorkina: 21)

- (28) ММ Икана Микале ден Бушмакин ялышке кочкишым кычал пуреныт ыле.  
*ikana Mikal'e den Bušmakin jal-äške kočkäš-äm kăčal*  
 once Mikale and Bushmakin village-ILL food-ACC search.CONV  
*pur-en-ät äle.*  
 enter-PST2-3PL äle  
 'Once Mikale and Bushmakin had gone to a village to search food.'  
 (Onchyko 10/1996: 89)

## 5.2. Prominent reference time and aspectual modification of events

Establishing a distinct PT can also lead to modification of the internal aspect of events, which has special temporal and narrative functions. Subsection 5.2.1 shows how PLUP opens a view to the temporal dimension of culmination-centered telic events in order to comment on the timing of an event and to structure the narration rhetorically. Subsection 5.2.2 then demonstrates how accommodating the PT at a reference time with IMPFV implicates limits for an atelic event and causes a reading of temporariness.

### 5.2.1. PLUP, telic events and measurement of the temporal dimension

Defined by the three phases that constitute events – the start, the cursus, and the end – telic events are those that include one of the extremes as a culmination point that makes the event completed (Comrie 1976: 44–48; Johanson 2000: 59–63 with the term *transformativity*). However, applying PLUP in telic events can have an effect of focusing on the duration of the cursus, which lowers the rhetoric relevancy of the achieved result and increases that of the process. Consider examples (29) and (30):

- (29) НМ Остатка спичкам ыдыралмыкем, тылымат олташ тумаш моштыделам.  
 Вет пумат йамдбылен шбынденам ылы – –.  
*ostatka spička-m äðäral-mäk-em, täl-äm=at olt-aš*  
 last match-ACC scratch-CONV.PRI-POSS.1SG fire-ACC=ADD warm.up-INF  
*tumaj-en moštä-ðel-am. bet pu-m=at jämðal-en*  
 think-CONV can-PST2.NEG-1SG yet wood-ACC=ADD prepare-CONV  
*šänd-en-äm äle.*  
 put-PST2-1SG äle  
 'After having scratched the last match, I could not even think about fire warming up. But I had prepared also the wood – –.' (KSYT: 84)

(30) ММ Тудо жаплан мый адакат Сотнур школышто улам ыле, кокымшо ала кумшо ганалан тушкак пӱртылынам. – – Ўдырымат кок гана налын шуктенам ыле.

*tudo žap-lan māj aḍak=at Sotnur škol-āšto ul-am āl'e,*  
 that time-DAT 1SG again=ENC Sotnur school-INE be-1SG āl'e  
*kok-āmšo ala kum-šo γana-lan tusk=ak pörtâl-ân-am.*  
 two-ORD or three-ORD time-DAT there.ILL=ENC return-PST2-1SG  
*üḍâr-âm=at kok γana nal-ân šukt-en-am āl'e.*  
 girl-ACC=ENC two time take-CONV reach-PST2-1SG āl'e  
 'At that time, I was again working at the Sotnur school, I had returned there for the second or third time. I had also managed to get myself a wife already twice.' (Onchyko 4/1996: 96)

Both examples represent completed events that culminate in their end (*finitransformatives* as in Johanson 2000: 58–62), emphasized by resultative and exhaustive converb constructions with the verbs *šandäš* 'to put (sitting)' and *šuktaš* 'to reach' (Bradley 2016: 219–220; 266), respectively. Nevertheless, the PT in the PLUP-marked sequences functions more as a measure of the temporal dimension of the cursus, and shows what kind of action has led to the current situation and what consequences it has. This causes a commentative tone towards the adequateness of the event being completed in the reference time. In (29), the running out of the matches makes the process of preparing the wood seem like useless work, and in (30), the narrator measures the amount of his marriages against the stagnant situation and thus creates a frustrated impression about the lack of progress in his life. This kind of rhetoric focusing on the process instead of the result of a telic event has been attested also for the Finnish pluperfect, and its usage is described as “stretching” the duration of a naturally short event (Pallaskallio 2016: 100–102). It is thus as if the prominent reference time is taken as a contextually relevant yardstick, which evaluates in what kind of environment the event reached its completion and if this was a practical timing.

The consequences of the temporal dimension of the cursus are commented on also in the examples (31) and (32) below:

(31) НМ – – кок студент сек пӱтӱри Машавлә докы пырыш. Галина Ивановна токыжы лач кечӱвӱлеш толын ылы. Тӱдӱ – – Петя – – гишӱш колын, – – лач иктӱм яды: – –.

*kok student sek pätäri Maša-βlä dokâ pârâ-š. Galina*  
 two student SUP firstly Masha-PL to enter-PST1.3SG Galina  
*Ivanovna to-kâ-žâ lač kečâβäl-eš tol-ân āl'â.*  
 Ivanova home-ILL-POSS.3SG right midday-LAT come-PST2.3SG āl'â  
*täḍä Petja γišän kol-ân, lač iktâ-m jadâ: – –.*  
 3SG Petya about hear-PST2.3SG right one-ACC ask.PST1.3SG  
 'At the very beginning, the two students went to Masha's place. Galina Ivanovna had come home right at midday. She had heard about Petya and asked right away one question: – –.' (Egorkina: 68)

(32) ММ Ик кечын, але сентябрь шуын огыл ыле, – – йолташем – –школышко пурыш.

*ik kečâ-n, a'le sent'jabr' šu-ân oγâl â'le, joltaš-em*  
 one day-GEN still September arrive-PST2 NEG.3SG â'le friend-POSS.1SG  
*škol-âško purâ-š.*  
 school-ILL enter-PST1.3SG

'One day, when even September had yet not arrived, my friend came to the school – –.' (Onchyko 4/1996: 69)

The telic events of 'coming' and 'arriving' are limited from the start, which is followed by the *cursus* (*initiotransformatives* in Johanson 2000: 62–63). They describe a change in the essence or position of the subject or object referent in the sense of 'S came here and is still here' (cf. Johanson 2000: 63). Narratively, the aspectually stretching PLUP marks temporal overlap with the focused *cursus*, which in (31) is the enabler of Galina's question and causes a dramatic tone of bad timing from the perspective of Petya. In (32), the negation of the autumn being present comments on the surprising haste of the friend's actions.

### 5.2.2. IMPFV, atelic events and temporariness

In the case of atelic events, the location of PT at reference time by simultaneity-coding IMPFV highlights the temporariness of the observed event. In other words, the observatory prominence given to the anchoring interval implies that the event has not been prevailing a long time before the reference time or will not prevail a long time after it. When the PT is situated in a certain reference time, the imperfectly seen event is explicitly said to temporally overlap only with its referent time, not with other intervals. This can be seen from example (33), where the measurement adverb *a'le* 'still' expresses that the stomping around in the house will not last long after the persons have come home.

(33) ММ Мемнан деке пурышна. Авам кечываллан колхоз паша гыч толынат, але мӱнгыштак тошкыштеш ыле.

*memnan deke purâ-š-na. aβa-m kečâβal-lan kolhoz*  
 1PL.GEN to enter-PST1-1PL mother-POSS.1SG midday-DAT kolkhoz  
*paša γâč' tol-ân=at, a'le mӱγγâ-št=ak toškâšt-eš â'le.*  
 work from come.PST2.3SG=ADD still home-INE=ENC stomp-3SG â'le

'We got to our place. My mother had come home for midday from the kolkhoz work and was still stomping around at home.' (Onchyko 4/1996: 42)

A similar situation is found in example (34), where the PT at the anaphoric adverb *tunam* 'at that time' restricts the living with the subject's family to the duration of second class and implicates that it would not have started long before it and would not continue long after it. The reference time is thus prominent in respect of its



dissimilarity with “neighboring” temporal intervals that are not characterized by the presence of similar events.

(34) ММ Тунам мый кокымшо классыште тунемам ыле.

*tunam māj kok-āmsō klass-āšte tunem-am āʼe.*

then 1SG two-ORD class-INE study-1SG āʼe

‘[I lived with my family.] At that time, I was studying in the second class.’

(Onchyko 5/1996: 108)

Ferreira (2016: 383) describes imperfective operators that are able to anchor naturally atelic (*unbounded* in his terminology) events to specific time intervals “particularly suitable for uses focusing on transitory properties of the participants”. The notion of temporariness associated with this kind of PT usage has a further effect on the aspectual features of the events, namely the dynamization of stativity. In theories on aspect and discourse structure, it has been recognized that stative events are loosely connected to narrative lines because of their temporally unrestricted nature, which makes the promoting of their exact location on the time axis less natural than that of dynamic events: they are by default always valid as permanent properties of their subject referents (Ferreira 2016: 378–381; Becker & Egetenmeyer 2018: 54; also Johanson 2000: 87 with the concept of *focality*). However, when the PT explicitly highlights a reference time for a stative event, an implication of the endpoint arises. This is most clearly seen from the examples where the IMPFV gives the stative verb MM *ulaš*, HM *ālaš* ‘to be’ a dynamic meaning of ‘location’, ‘size of a group’, or ‘profession’, as illustrated in examples (35), (36), and earlier example (30), respectively.

(35) НМ Тенгечыжы бине тоннаок ылам ылыш, нигышкат кеаш сөрбыделам —.

*teŋgečə-žə əne to-n-na=ok āl-am āʼā=š,*

yesterday-POSS.3SG yet home-LOC-POSS.1PL=ENC be-1SG āʼā=ENC

*niyāšk=at ke-äš sörə-δe-lam.*

nowhere=ADD go-INF promise-NEG-PST2.1SG

‘Yet yesterday [when the accident happened] I was just staying at home, I had not promised to go anywhere.’ (IO: 123)

(36) ММ Мөнгыштыжө уныкаже дене коктын улыт ыле.

*möŋgəštyžə unāka-že dene kōkt|ān ul-āt āʼe.*

home-INE-POSS.3SG grandchild-POSS.3SG with two|ADV be-3PL āʼe

‘[We entered the house.] He was alone at home with his grandson.’

(Onchyko 6/1996: 146)

## 6. Perspective time and narrative polyphony

This section examines the role of PT in non-temporal structuring, where the PT forwards the voices of the participants in the story. Without distinct PT, the narration is told by an external omniscient narrator, who remains invisible outside the story world. When a PT is added, a voice of an internal narrator is heard in the story. Subsection 6.1 discusses situations where the internal perspective is that of the external narrator, who comments on the structure of the plot and thus becomes visible as a conscious person. Subsection 6.2 investigates the voices from protagonists inside the story world.

### 6.1. Voice of a visible narrator

As defined by Oversteegen & Bekker (2002: 137), the story-external PT represents the voice of an omniscient and impersonal narrator, who does not manifest their position in the discourse. This default structure in narration is called *zero-perspective*. Story-internal PT, in turn, is associated with a visible mind, who overtly articulates their presence in the narration. Both PLUP and IMPFV can make the voice of the narrator themselves heard in the discourse for different narrative or semantic purposes. Let us start from PLUP, as in example (37):

(37) ММ Тулото воктенак Гера – – мален кия. Когыньыштым тенгече Бяшим дене пырля, экспедицийын лагерьжым оролаш коденыт ыле.

<i>tuloto</i>	<i>βokten=ak</i>	<i>Gera</i>	<i>mal-en</i>	<i>kij-a.</i>	<i>koγâhâ-štâ-m</i>
fireplace	by=ENC	Gera	sleep-CONV	lay-3SG	both-INE-ACC
<i>teŋgeče</i>	<i>Bjašim</i>	<i>dene</i>	<i>pârġa</i>	<i>ekspedicij-ân</i>	<i>lager-žâ-m</i>
yesterday	Byashim	with	together	expedition-GEN	camp-POSS.3SG-ACC
<i>orol-aš</i>	<i>koδ-en-âġ</i>	<i>âġe.</i>			
guard-INF	leave-PST2-3SG	âġe.			

‘Gera was sleeping by the fireplace. He, together with Byashim, had been left to guard the camp of the expedition.’ (Onchyko 12/1996: 31)

For clarifying the internal logic of the discourse, the narrator shifts their consciousness temporarily inside the story as if they would be at that place, pointing out the causal relationships behind the meeting with Gera who is sleeping next to the fireplace. The question is thus about differentiating between a distant narrator and a closer one, who brings up personal evaluations. This kind of personalized voice is called *mono-perspective*, which complicates the discourse leveling but retains the narrator as the author of the knowledge (Oversteegen & Bekker 2002: 137). The voice of the visible narrator is often accompanied by commentative parentheses along the lines of ‘it must be mentioned’, as in example (38), where the narrator makes an additional clarification in brackets on why the protagonist is suddenly so afraid of spies:

(38) НМ – Американский самолёт..! Шпион..! манеш. (Келесаш келеш: тѳнѳм, лачокат, Свердловск хала вѳлнѳ Пауэрсѳм шин валтенѳт вѳлы.)

*amerikanskij samol'ot..! špion..! man-eš (keles-äš kel-eš:*  
 American airplane spy say-3SG say-INF must-3SG  
*tänäm, lačokat, Sverdlovsk χala βäl-nə Pauers-äm*  
 at.that.time indeed Sverdlovsk city top-LOC Powers-ACC  
*šĳi-n βalt-en-ät äĳ'ä)*  
 hit-CONV set.down-PST2-3PL äĳ'ä

‘– An American plane...! A spy...! he shouted. (It must be mentioned that at that time, indeed, [the American pilot] Powers had been shot down above the city of Sverdlovsk.)’ (IO: 137)

The mono-perspective is present also in those cases of IMPFV usage where the narrator manifests their subjective evaluator role in propositions about the internal experiences of the subject referents, as in example (39) with event of ‘loving’:

(39) ММ Тудо армийѳште кавалерист лийѳн, имнѳым пеш ѳрѳтата вѳле.

*tudo armij-äšte kavalerist lij-än, imňä-m peš*  
 3SG army-INE cavalryman become-PST2.3SG horse-ACC very  
*jörat-a äĳ'e.*  
 love-3SG äĳ'e

‘He was a cavalryman in the army, he loved horses very much.’

(Onchyko 10/1996: 19)

Typical internal experiences concern emotions, cognitive acts, and sensory experiences possessed by the subject referents, and they are characterized by an *endophoric* nature: they cannot be observed externally and the epistemic authority about the events lies in the experiencing person (Plungian 2010: 33–34; Labov & Fanshel 1977). The endophoricity may have a special grammatical status in knowledge-based marking, as is the case in Mari where the personal narrator is likely to show up precisely in cases of internal experiences, which can be explained by the relevancy to specify one’s relationship to information of non-observable nature: the proposition about the protagonist’s internal state of loving horses is based on the narrator’s evaluation. In addition to the emotion verb MM *jörataš* ‘to love’, the cognition verb MM *palaš* ‘to know’ is also frequently attested in IMPFV in the data.<sup>19</sup> As will be seen in subsection 6.2.2, the endophoricity motivates also perspective changes related to past perfect tenses.

19. Interestingly, the usage of the ‘was’-element seems to function as an endophoric marker also in other languages, where the existence of the juxtapositional analytic tenses is a result of Turkic contacts, such as Old Hungarian (Kiss 2013), where the combination PRESENT + *vala* ‘was’ occurs commonly with verbs referring to “persistent feelings” or cognitive states like *akar* ‘to want’, *kíván* ‘to desire’ and *tud* ‘to know’ (Abaffy 1992: 158–160; Mohay 2018: 83, 153–155).

## 6.2. Voice of the protagonist

Another type of polyphony is caused by the presence of the protagonists' voice besides the narrator's own. In the case of narrative tenses, the question is not about direct quotations but rather focalization, where the narrator locates themselves in the other person (Lund 2015: 65) causing a *poly-perspective* in the discourse (Oversteegen & Bekker 2002: 137). The still distinct relation between narrator- and protagonist-persons is formally visible in the evidential conjugation of the particle (as discussed in 3.2), which is the component in the analytic structures that connects the narrator's speech time to the past event: the knowledge-based stance of the protagonist towards the event is expressed by the voice of the narrator, who thus "plays" the character. The difference between the narrator and the protagonist is intuitive in the case of stories told in third person, but the division can be made also with first-person protagonists, when the persons of the narrator and the observer seem to be essentially the same. In these cases, the external narrator can be defined as having a general view of the actualized history, while the protagonist meets the situations synchronically "at the scene". Subsection 6.2.1 examines the sensory usage of PT, where events are observed through the senses of the protagonist. Subsection 6.2.2, in turn, presents the cases where the protagonist evaluates their earlier experiences.

### 6.2.1. Perspective time at sensory acts

A story-internal perspective is often added to the narration when the narrator wants to introduce an event via senses of the protagonist. This is true for both IMPFV and PLUP, as shown in (40) and (41), respectively:

(40) ММ Тупшо гыч разрывной пуля лектын – –. Эсогыл көргүзгөржат коеш  
 ыле.

<i>tup-šo</i>	<i>γāč</i>	<i>razrâvnoj</i>	<i>puľa</i>	<i>lekt-ân.</i>	<i>esoγâl</i>
back-POSS.3SG	from	explosive	bullet	go-PST2.3SG	even
<i>körγüzγar-ž=at</i>	<i>koj-eš</i>	<i>âľe.</i>			
viscera-POSS.3SG=ADD	be.visible-3SG	âľe			

'An explosive bullet had gone through his back. Even the viscera were visible.'

(Onchyko 12/1996: 38)

(41) ММ Тудо кечын лум возо. Эр йӱдымак ала-кушеч поран талышнен толын, кечыгут мардеж шӱшкен, касвелеш, мемнан мӱнгына каяш тарванымына годым, игече чот йӱкшемден ыле.

*tudo kečâ-n lum ßoz-o. er jüð-âṁ=ak*  
 that day-GEN snow fall-PST1.3SG morning night-ACC=ENC  
*ala-kušēč poran talâšn-en tol-âṁ, kečâγut*  
 INDEF-from.where storm strengthen-CONV come-PST2.3SG whole.day  
*mardež šüşk-en, kasvel-eš, memnan möṅγâ-na*  
 wind whistle-PST2.3SG evening-LAT 1PL.GEN home.ILL-POSS.1PL  
*kaj-aš tarvanâ-mâ-na γoðâṁ, iyečē čot*  
 go-INF prepare-PRTC.PASS-POSS.1PL during weather very  
***jükšemð-en ð'ē.***  
 turn.cold-PST2.3SG ð'ē

‘The snow fell down that day. In the small hours, a storm had come from somewhere strengthening all the time, the wind had whistled, by evening when we prepared to go home, the weather had turned very cold.’ (Onchyko 4/1996: 57)

In (40), the protagonist comes to the fight scene and sees the wounded person. Similarly, example (41) highlights how the fact of the weather having turned cold is sensed when the protagonists go outside and locates the PT at this sensory act. A majority of the examples with sensory PT indeed represent these kinds of situations where a person “comes and sees” or otherwise experiences and gets to know something. This explains also example (1) in the Introduction, where the protagonist comes in and sees the person reading.

The usage of sensory PT thus highlights the act of the protagonist processing the information, which “confers more vivaciousness/liveliness to the narrative”, as Becker (2021: 291) states. This kind of tone is missing from utterances with PST2, as in example (3), where the external narrator just repeats a ready chain of events.

A contrast between internal and external knowledge is seen in (42). The speaker gives a report on a party he has been at. The sequence includes two instances of anterior events. The preparing of the party marked by PST2 is general background

information he knew beforehand, while the event of people having arrived marked by PLUP was observed with his own eyes in the scene:<sup>20</sup>

(42) ММ – – Сотнур школышто – – пайремгече лие. Тудым марий йылме – – туныктышо- влак – – ямдыленыт да эртареныт. Пайремышке районысо чыла школла гыч туныктышо- влак – – толыныт быле.

*Sotnur skol-âšto pajremyeče lij-e. tuðâ-m marij*  
 Sotnur school-INE party.day become-PST1.3SG it-ACC Mari  
*jâlme tunâktâšo-βlak jamðâl-en-ât ða ertar-en-ât.*  
 language teacher-PL prepare-PST2-3PL and carry.out-PST2-3PL  
*pajrem-âške rajon|âso čâla skol-la γâč tunâktâšo-βlak*  
 party-ILL county|ADJ all school-PL from teacher-PL  
*tol-ân-ât âl'e.*  
 come-PST2-3PL âl'e

‘A party day was announced at the Sotnur school. It had been prepared and carried out by the teachers of the Mari language. Teachers from all the schools of the county had come to the party.’ (Onchyko 4/1996: 39)

The subjective overtones related to a promoted conscious observer inside a story world will next be discussed with the mental focalization.

### 6.2.2. Perspective time at mental acts

This subsection presents cases where the synchronically observed events are channeled not through the senses of the protagonist but their mind. This is a function of PLUP due to its aspectotemporal structure, which enables retrospection to one’s memories. This is illustrated in example (43):

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20. Even though I have excluded the evidential variation of analytic tenses from the current paper, an aspect-related specification must be made concerning the concept of information source. In the case of PLUP, the perfect viewpoint in sensory-based PT setting is connected to observing the event by its result, leading one to wonder whether an inferential PLUP2 should be used in examples like (41) and (42). However, both of the telic events of ‘turning cold’ and ‘coming’ are initiotransformatives covering a cursus where the results of the events prevail (the weather being cold and the teachers being present), and the evidential directness is achieved if this result state is observed directly. The case is different with finitransformative events as in the example below, where the event of writing a letter scopes over the process of writing but not over any state that occurs after the writing is completed. Thus, the PLUP2 is used for coding the result-based inference towards the event:

HM – – талашен лыдын лăктым. Ик боец Ыдър тăнгжы докы сирмăшым сирен ылын.  
*talaš-en lăð-ân lâkt-əm. ik bojec əðər tãŋγ-žə*  
 pursue-CONV read-CONV leave-PST1.1SG one soldier girl friend-POSS.3SG  
*ðokâ sirmăš-əm sir-en âlân.*  
 to letter-ACC write-PST2.3SG âlân  
 ‘I tried to read [the envelope]. One soldier had apparently written a letter to his girlfriend.’  
 (KSYT: 68)

(43) ММ Нигунам ок мондо, кунам тудым икана тўнденыт. — тудын пу йолжым кужу олымбак пудаленыт ыле.

*n̄iyunam o-k mondo, kunam tud̄-m ikana t̄iŋd-en-āt.*  
 never NEG-3SG forget.CNG when 3SG-ACC once bend-PST2-3PL  
*tud-ān pu jol-žā-m kužu olāmba-k*  
 3SG-GEN wood leg-POSS.3SG-ACC long top.of.bench-ILL

*pudal-en-āt āl'e.*

nail-PST2-3PL āl'e

‘He will never forget when they had once bullied him. They had nailed his wooden leg to the long bench.’ (Onchyko 5/1996: 48)

In the example, an overt referative clause ‘he will never forget’ introduces a backwards-looking recollection of the protagonist, where the PT opens a view to the person’s memories, which are deemed relevant in the moment (cf. Lund 2015: 68; Pallaskallio 2016: 112–115; Becker 2021: 290–291). The difference between an external and internal backdrop is contrasted in (44) without overt introductory clauses, where the PST2 marks simple anteriority for temporal structuring, while PLUP points to experiences which the protagonist remembered at the time:

(44) ММ Икымше командировкем Шернур районыш — — лие. Тымарте мый весешамычын возымыштым лудынам, — — репортер дене пашам ышташ тунемынам. Иктым лоденак каласеныт ыле: тыгай материалыште «илыше йўк» лийшаш

— —.

*ik-āmše komandirovk-em Šernur rajon-āš lij-e.*  
 one-ORD work.trip-POSS.1SG Shernur county-ILL become-PST1.3SG  
*tāmarte māj βese-šamāč-ān βozā-mā-št-ām*  
 until.this 1SG other-PL-GEN write-PRTC.PASS-POSS.3PL-ACC  
*lud-ān-am, reporter dene paša-m āšt-aš tunem-ān-am.*  
 read-PST2-1SG reporter with work-ACC do-INF learn-PST2-1SG  
*iktā-m lod-en=ak kalas-en-āt āl'e: tāyaj*  
 one-ACC sharpen-CONV=ENC say-PST2-3PL āl'e this.kind.of  
*material-āšte ilā-še jūk lij-šaš*  
 material-INE live-PRTC.ACT voice become-PRTC.NEC

‘My first work trip [as a journalist] was to the Shernur district. Before that I had read the writings of others and learned the work with a reporter colleague. They had emphasized one thing to me: there must be a “living voice” in this kind of material.’ (Onchyko 4/1996: 94)

Stylistically, this kind of PT usage of past perfect operators causes a tone of intimacy of the experience (Pallaskallio 2016: 112) and forwards information in a “very vivid way” (Becker & Egetenmeyer 2018: 52). In other words, the applying of PT at the mental act of becoming aware of something raises the level of subjectivity in the narration. The perspective shift to the protagonist is thus naturally common in the case



of endophoric experiences, where the voice of the experiencer is also pragmatically justified due to their epistemic authority over the event. In the data, PLUP is commonly attested alongside the sensory verbs MM *kolaš* ‘to hear’, MM, HM *užaš* ‘to see’, the cognitive verbs HM *päläš* ‘to know’, MM *šonaš*, HM (*ma*)*šanaš* ‘to think’, MM *örânaš* ‘to wonder’, and the emotion verbs MM *kuanas* ‘to be happy’, MM *lüdaš* ‘to be afraid’. Example (45) illustrates a sensory verb:

(45) MM Микале ўдырым кечывалым кудывече гоч кок-кум гана эртен куржмыжым ужын быле.

*Mikal'e üdâr-âm kečâbal-âm kudâβεe'e γoč kok-kum γana*  
 Mikale girl-ACC midday-ACC yard via two-three time  
*ert-en kurž-mâ-ž-âm už-ân âl'e.*  
 pass-CONV run-PRTC.PASS-POSS.3SG-ACC see-PST2.3SG âl'e  
 ‘Mikale had seen the girl run a few times through the yard at midday.’  
 (Onchyko 10/1996: 85)

In the example, the protagonist meets a girl and “digs up” a sensory memory about having seen the same person earlier. Example (6) also represented the case of sensory endophoricity: the protagonist refers to their own experiences about having heard a story. In (46), in contrast, the story-internal narrator becomes aware of his own thoughts that he has gone through before.

(46) MM Серыш гыч пытартышлан умылен нальым, мо лийын мыйын кочам дене. Кузе шоненам быле, тугак лекте — —.

*serâš γâč pâtartâšlan umâl-en nalâm, mo*  
 letter from finally understand-CONV take.PST1.1SG what  
*lij-ân mâj-ân kočâ-m dene. kuze*  
 become-PST2.3SG 1SG-GEN grandfather-POSS.1SG with how  
*šon-en-am âl'e, tuγ=ak lekt-e — —.*  
 think-PST2-1SG âl'e like.that=ENC leave-PST1.3SG  
 ‘From the letter I finally understood what had happened to my grandfather.  
 It all happened just like I had thought.’ (Onchyko 12/1996: 42)

A perspective shift with the emotion verb, in turn, is illustrated in example (47), where the protagonist verbalizes the feelings that he has had:

(47) MM Только вот öрынам быле: ватыжым кунам öндалын шыматын шукта?

*tol'ko vot ör-ân-am âl'e: batâ-žâ-m kunam*  
 only well wonder-PST2-1SG âl'e wife-POSS.3SG-ACC when  
*öndal-ân šâmat-en šukt-a?*  
 hug-CONV comfort-CONV have.time-3SG  
 ‘I had just been wondering one thing: when did he ever have time to comfort his wife?’ (Onchyko 4/1996: 66)

In wrapping up this discussion of narrative voices, it must be clarified that the employment of story-internal PT is by no means obligatory but rather a narrator's choice based on the subjectivity of the perspective. That is why I do not find it of great interest to calculate, within the framework of the current paper, a ratio between PST2 and the two analytic tenses in the marking of internal experiences. Where this kind of research would be relevant, however, is in the comparison of genres: is grammatically marked narrative polyphony or “intimacy” equally characteristic for fictional stories and non-fictional reports, for instance? Similarly, the subjective epistemic tones related to the endophoric marking by IMPFV (as discussed e.g. in Kittilä 2019 and Bergqvist & Kittilä 2020: 8–9) should be evaluated in detail.<sup>21</sup>

## 7. Conclusions

In this paper, I have strived to shed light on a central but so far unexplained question on narrative-tense variation between aspectually synonymous simple and analytic past tenses in Mari. The main finding is the presence of a distinct, story-internal perspective time in the analytic tenses IMPFV and PLUP and the absence thereof for the simple past tense PST2. A distinct perspective time is employed for creating internal complexity for a story line, either in the form of temporal organization or narrative polyphony. Without it, on the contrary, the structure of the narration remains perspectively one-dimensional. The concept of “prominence” from the “tense in discourse” framework captures well the functions of the distinct perspective time.

The functional findings made on the temporal perspective in Mari mostly follow the typologically well-described tendencies attested in many other tense languages. However, Mari differs from the reference languages in the sense that the perspective time is not incorporated into the imperfective or past perfect viewpoints *per se*, but there are two sets of aspectotemporal operators for two types of discourse structuring. This is due to the transparent morphosemantics of the analytic tenses, which

21. The association between the evidentially non-indirect particles and endophoricity is further seen in their abstracted usage as temporally neutral particles in dialogue, where they attach in first-person predicates representing the above-mentioned verb types. This is seen in the following example, where the combination PST2 + əʎe cannot be interpreted as PLUP due to tense parallelism between the two clauses:

MM – Тыгайым иктаж гана ужында? Мый гын колынат, ужынат омыл ыле.  
*təɣaj-ə̃m            iktəʃ    ɣana    uʒ-ə̃n-ɔa?*    *mə̃j    ɣə̃n    kol-ə̃n=at,*  
 this.kind.of-ACC    some    time    see-PST2-2PL    1SG    EMPH    hear-PST2=ENC  
*uʒ-ə̃n=at            oməl            ə̃ʎe.*  
 see-PST2=ENC    NEG.1SG    ə̃ʎe  
 ‘– Have you ever seen something like this? At least I have not heard or seen.’  
 (Onchyko 7/1996: 114)

The exact semantics of this kind of usage are yet to be investigated.

makes it possible to point out the temporal coordinates from their formal structure also in narration, where the covertly past anaphoric PST2 would do. At the same time, this paper is one of the most detailed functional descriptions so far on this kind of formal manifestation of the mental concept of perspective time, and it also represents a typological initiative on the capabilities of the retrospectivization-based past tenses in general. Hitherto, the cooperation of the lexical verb and the retrospectivizing elements has been discussed solely from the perspective of temporal manipulation, leaving aside the question of what actually can be shifted to the past. As was shown, the “event-external” epistemic and evidential perspectives are lost during the retrospectivization in Mari. Whether this is characteristic of the retrospectivization-based temporal strategies more generally is yet to be investigated.

Another subject of the study is the further developmental potential of the retrospectivizing particles, a topic now awakened mostly in the footnotes to the present paper. The syntactic freedom, the association with verbs that refer to internal experiences, and the evidential and mirative conjugation of the items seem to enable a reanalysis of the primarily temporal elements into solely knowledge-based functions. The elaboration of these observations should be central in future research on the TAME phenomena in Mari, in addition to which a proper contrastive analysis with other languages of the Volga–Kama area should be carried out for appraising the contact-based background in the expanded usage of the particles.

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## Glossing abbreviations

ACC	accusative	GEN	genitive
ADD	additive enclitic	ILL	illative
ADJ	adjectival derivational suffix	IMPFV	analytic imperfect
ADV	adverbial derivational suffix	INE	inessive
CNG	connegative	INDEF	indefinite pronoun
COMP	comparative	INF	infinitive
CONV	positive instructive converb	LAT	lative
CONV.NEG	negative instructive converb	LOC	locative
CONV.PRI	converb of prior action	NEG	negation verb
CONV.SIM	converb of simultaneous	ORD	ordinal
	action	PL	plural
DAT	dative	PLUP	analytic pluperfect
EMPH	emphatic particle	POSS	possessive suffix
ENC	enclitic	PRTC.ACT	active participle



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