

Past time reference in a language with not-so-optional tense: The case of Forest Nenets

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What is optional tense?

◆ there are temporal systems where **past tense marking is not obligatory when talking about events in the past** (not in the Narrative Present scenarios, but everywhere!)

-> see descriptions for Medumba (has optional+graded tense!) (Mucha 2017), Awing (Mucha and Fominyam 2017) and Tlingit (Cable 2017)

◆ consider examples from Washo (Bochnak 2016):

(1) Ø-*háʔaš-i*

3-rain-IND

'It is raining.' / 'It rained.' / 'It was raining.'

PAST+PRESENT

(2) Ø-*háʔaš-unil-i*

3-rain-PAST-IND

'It rained.' / 'It was raining.'

PAST

◆ **Note:** here we ignore Narrative Present and similar narrative-related temporal phenomena. We do understand that tense may locate the event time in relation to the anaphorically determined time and not ST, but we opt for ST and use non-narrative contexts here for clarity.

Forest Nenets (<Samoyedic<Uralic)

- ◆ Forest Nenets has three evidentially unmarked tenses:

Aorist (AOR) -∅, no overt marking

Past (PST) -š

Future Tense (-n or -t)

- ◆ all existing descriptions of Nenets tense concern primarily Tundra Nenets (Nikolaeva 2014; Urmanchieva 2016; Burkova 2010, 2022)

- ◆ as we will show, **Forest Nenets distribution of tenses is different from Tundra Nenets** and calls for separate treatment

Nenets Aorist (∅ form) has been previously described as an ‘indefinite tense’ (Burkova 2010), which supposedly **renders Forest Nenets an optional past language** → **is it really so??**

- ◆ sketches of FN grammar can be found in (Tereshchenko 1973; Verbov 1973; Sammallahti 1974; Koshkaryova 2005; Burkova 2022)

Data

◆ The data was collected during expeditions to Tarko-Sale and Kharampur village (YaNAO, Russia) organized by Svetlana Toldova in 2023-2025

◆ Each example was verified by at least three native speakers of Forest Nenets. All the errors are ours.



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The puzzle

Past (PST): **past** reference with both **perfective** and **imperfective**

Aorist (AOR): **past** reference with **perfective**, **present** reference with **imperfective**

	PRES	Recent PAST	Distal PAST
PERFECTIVE	*AOR, *PST	AOR, PST	*AOR, PST
IMPERFECTIVE	AOR, *PST	*AOR, PST	*AOR, PST

(3) Imperfective + Present

man'	d'olnu	n'aŋat	kałita-ŋa-t-(#aš)
1SG	morning	near	fish-GFS-SUBJ.1SG-(#PST)
'I've been fishing since morning'			

(4) Perfective + Present

Impossible (Bennet & Partee 2004, Malchukov 2009, de Wit 2016)

Recent Past

(5) Imperfective + Recent Past (!unlike in Tundra Nenets)

šajŋd'et loxo-m'pí-š // *loxox-m'pí

tea.pot boil-ATEL-PST[3SG] // *boil-ATEL[3SG]

'The tea pot boiled' [Then it cooled down]

(6) Perfective + Recent Past

četid'aŋ kad'an-λ ko-ŋa-ta-š // ko-ŋa-t

just morda-POSS.2SG find-GFS-SUBJ.1SG-**PST** // find-GFS-SUBJ.1SG

'I've just found a morda' [Is it yours?]

(7) Imperfective + Distal Past

... po-xana? lan_kałti-ńina d'ił'i-ŋa-ma-š // *d'ił'i-ŋa-ma?

... year-LOC Salekhard-LOC live-GFS-1PL-**PST** // live-GFS-1PL

[In 1994,] 'We lived in Salekhard'

(8) Perfective + Distal Past

... po-xana? lan_kałta-n ka-d'a-ma-š // *ka-d'a-ma?

... year-LOC Salekhard-DAT go-SFS-1PL-**PST** // go-SFS-1PL

[In 1994,] 'We moved to Salekhard'

Future temporal reference

- ◆ near future, plans (futures in the sense of Copley 2009)

(9) **Futures**

čuki d'uλnu-ŋ prazdnik-xana **kinu?-ŋa-t**

this morning-GEN celebration-LOC **sing-GFS-1SG**

'This morning I'm singing at the festival {said at home, while getting ready}

Aspect or Aktionsart?

The relevant distinctions:

◆ **Perfective** vs. **Imperfective**

◆ **Telic** vs. **Atelic**

So-called 'grey zone': **variable** judgements

(10) **Perfective** + **Atelic**

was'a	cukud'aλa	n'axaλ	cas	naŋu-m-ta	šeλta-p'i-š
wasya	today	3	hour	boat-ACC-POSS.3SG	build-ATEL-PST[3SG]

// %šeλta-p'i

// build-ATEL[3SG]´

‘Vasya built the boat for 3 hours today’

→ Henceforth, we make a deliberate choice to label it as an **aspectual split**

The puzzle

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PERFECTIVE	*AOR, *PST	AOR, PST	*AOR, PST
IMPERFECTIVE	AOR, *PST	*AOR, PST	*AOR, PST

Research questions

Q_{main} : **What is the semantic difference between PST and AOR?**

Q1: How can one account for the aspectual split?

Q2: How can one account for the recency constraint imposed on AOR?

Q3: Is there any pragmatic competition between PST and AOR?

Semantics of PST

(11) $\llbracket \text{PST} \rrbracket = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$

Scopal test shows that **PST is existential, not pronominal**:

(12) Negation Scope: **NEG > PST** (test from Chen et al. 2021)

mañi xaλaηkaλta-n ñit-**as'** d'ata-λ

1SG Salekhard-DAT NEG-**PST** go-CN

[Where would you like to go?]

'I've never been to Salekhard' [That's why I want to go there]

Semantics of PST

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Scopal test shows that **PST is existential, not pronominal**:

(13) Negation Scope: **PST > NEG** (Chen et al. 2021)

mǎńŋidi mima-xana kaŋa-štu-t-aš (ŋidi mima-xana)

1SG some time-LOC go-HAB-1SG-PST (some time-LOC)

ńi-štu-t-aš

NEG-HAB-1SG-PST

[Every spring father would go to the city and suggested to go with him]

‘Sometimes I would go, sometimes I refused’

Optional tense without pragmatic competition fails

◆ We could argue that aorist is a non-future tense. This could render Forest Nenets a proper ‘optional past’ system.

(14) PST: $TT < ST$
AOR: $TT \leq ST$

◆ but!! $TT \leq ST$ restriction by itself clearly does not explain the **aspectual split**:

- a) why **AOR is infelicitous with PFV predicates in non-recent past**
- b) why **AOR is infelicitous with any IPFV predicates in the past, recent or distant**

→ do we need pragmatic competition?

Exhaustification

◆ Bochnak (2016) notes that the **past and non-future forms in Washo do not enter pragmatic competition**, although one is weaker than the other → he suggests that **they are not structural alternatives**

◆ **maybe the aspectual split arises due to pragmatic competition?**

here are the assumed semantics of tenses and viewpoint aspect

- (15) a. $PST = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$ STRONGER
b. $AOR = \lambda P \lambda t. \exists t' [t' \leq t \wedge P(t')]$ WEAKER

- (16) a. $[[IPFV]] = \lambda P v t \lambda t. \exists e. P(e) \wedge t' \subseteq \tau(e)$
b. $[[PFV]] = \lambda P v t \lambda t. \exists e. P(e) \wedge \tau(e) \subset t'$

◆ **What if PST and AOR are structural alternatives and enter competition through EXH** (Fox 2007)

(see how Vostrikova, Kuslyi 2024 use EXH to derive cessation inferences)

Exhaustification

- (15) a. $PST = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$ STRONGER
b. $AOR = \lambda P \lambda t. \exists t' [t' \leq t \wedge P(t')]$ WEAKER

- (16) $Alt(\llbracket AOR \text{ PFV } \varphi \rrbracket) = \{\llbracket AOR \text{ PFV } \varphi \rrbracket, \llbracket PST \text{ PFV } \varphi \rrbracket\}$

Excludable alternatives: $\llbracket PST \text{ PFV } \varphi \rrbracket$

$$EXH(\llbracket AOR \text{ PFV } \varphi \rrbracket) = \lambda t. (\exists t'. \exists e. P(e) \wedge t' \leq t \wedge \tau(e) \subset t') \wedge (\neg \exists t'. \exists e. P(e) \wedge t' < t \wedge \tau(e) \subset t')$$

a) There is a time not later than ST such that it contains ET

b) There does not exist a time earlier than ST such that it contains ET

→ TT overlaps with ST or is equal to ST and it contains ET

Exhaustification

- (15) a. $PST = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$ STRONGER
b. $AOR = \lambda P \lambda t. \exists t' [t' \leq t \wedge P(t')]$ WEAKER

- (17) $Alt(\llbracket AOR \text{ IPFV } \varphi \rrbracket) = \{\llbracket AOR \text{ IPFV } \varphi \rrbracket, \llbracket PST \text{ IPFV } \varphi \rrbracket\}$

Excludable alternatives: $\llbracket PST \text{ IPFV } \varphi \rrbracket$

$$EXH(\llbracket AOR \text{ IPFV } \varphi \rrbracket) = \lambda t. (\exists t'. \exists e. P(e) \wedge t' \leq t \wedge t' \subseteq \tau(e)) \wedge (\neg \exists t'. \exists e. P(e) \wedge t' < t \wedge t' \subseteq \tau(e))$$

a) There is a time not later than ST such that it forms a part of ET

b) There does not exist a time earlier than ST such that it forms a part of ET

→ TT overlaps with ST or is equal to ST and it is included into ET

A head-on solution: “weak present”

◆ but! **instead of deriving $ST \subseteq TT$ through EXH, we could simply encode it as semantics of AOR**

◆ Rather than $TT = ST$ as standardly assumed for present tense, we suggest that **AOR encodes $ST \subseteq TT$** and make an ontological assumption that the **domain of future is unavailable for non-modal tenses**

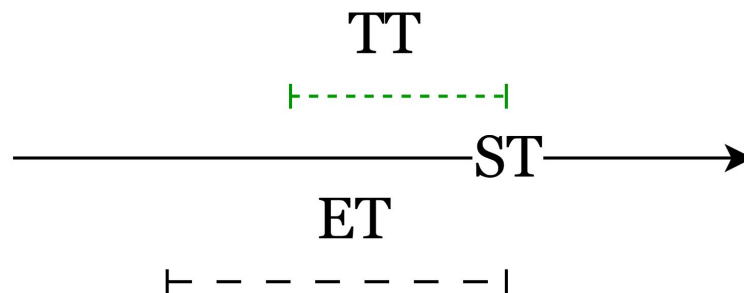
$$(18) \llbracket \text{AOR} \rrbracket = \lambda P \lambda t. \exists t' [t \subseteq t' \wedge P(t')]$$

$$\llbracket \text{PST} \rrbracket = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$$

Then, we obtain the following predictions.

◆ with **imperfective predicates**:

ET always overlaps with ST



A head-on solution: “weak present”

- ◆ Instead of $TT=UT$ as standardly assumed for present tense, we suggest that AOR encodes $ST \subseteq TT$

$$(18) \quad \llbracket AOR \rrbracket = \lambda P \lambda t. \exists t' [t \subseteq t' \wedge P(t')]$$

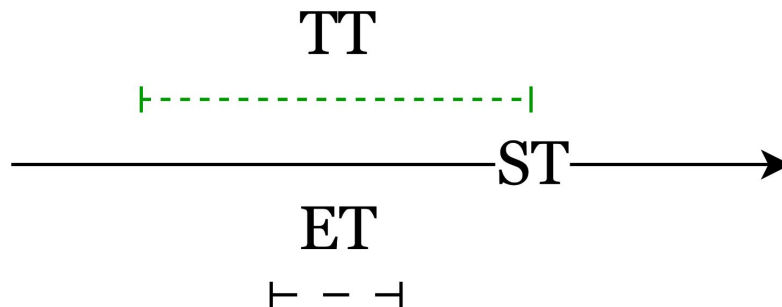
$$\llbracket PST \rrbracket = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$$

Then, we obtain the following predictions.

- ◆ with **perfective predicates**:

ET included into TT that overlaps with ST

-> **PFV predicates in AOR may only be located in the recent past**



The adverbial puzzle

—> consider the following contrast

◆ **ñełšun** ‘recently’

- (19) xoma^hku **ñełšun** xaʔtæλ řetała-xat **ta-ŋa-%(š)**
Khomaku recently heathbird forest-ABL bring-GFS-%(PST)
‘Khomaku recently brought a healthbird from the forest’
- (20) xoma^hku **ñełšun** **d’ał-ŋa-#(š)** četaŋkona-ła-j?
Khomaku recently cry-GFS-#(PST) now sleep-INCH-REFL.3SG
‘Khomaku recently cried, but now he has fallen asleep’

◆ **četi-d’an** ‘now-AUG.GEN’

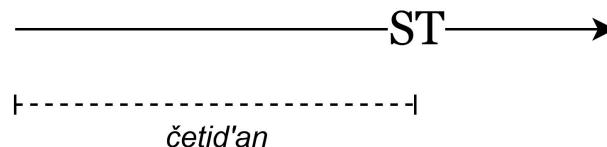
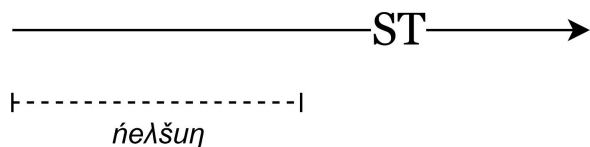
- (21) xoma^hku **četid’an** xaʔtæλ řetała-xat **ta-ŋa-^{ok}(š)**
Khomaku recently heathbird forest-ABL bring-GFS-^{ok}(PST)
‘Khomaku recently brought a healthbird from the forest’
- (22) xoma^hku **četid’an** **d’ał-ŋa-*(š)** četaŋkona-ła-j?
Khomaku recently cry-GFS-#(PST) now sleep-INCH-REFL.3SG
‘Khomaku recently cried, but now he has fallen asleep’

The adverbial puzzle

◆ both adverbials are translated as ‘recent’, but only *četid'an* allows for PFV predicates in AOR

	perfective	imperfective
ñeλšun	PST, %AOR	PST, #AOR
četid'an	PST, AOR	PST, #AOR

◆ idea: **maybe *četid'an* includes ST?**



A head-on solution: “weak present”

- ◆ Instead of $TT=UT$ as standardly assumed for present tense, we suggest that AOR encodes $ST \subseteq TT$

$$(23) \quad \llbracket AOR \rrbracket = \lambda P \lambda t. \exists t' [t \subseteq t' \wedge P(t')]$$

$$\llbracket PST \rrbracket = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$$

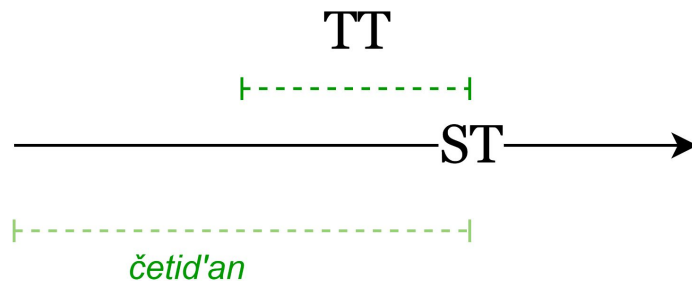
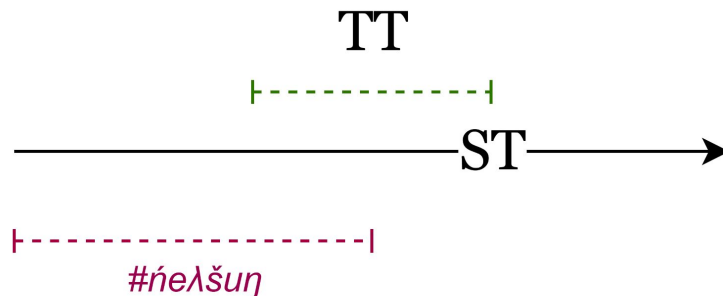
Then, we obtain the following predictions.

- ◆ with **perfective predicates**:

ET included into TT that overlaps with ST

-> **if TT is restricted to times preceding ST,**
we get #AOR

e.g. with *hélšun*



Interim Summary

- ◆ AOR as non-future tense

- + pragmatic competition with PST $\leadsto ST \subseteq TT$

- ◆ AOR as 'weak present': $ST \subseteq TT$

- ◆ Are there any other ways to account for the aspectual split?

- ◆ a null perfect aspect under AOR

Null Perfect: idea

Aorist could be **plain present tense**:

$$(24) \llbracket \text{AOR} \rrbracket = \lambda P \lambda t. [P(t)]$$

With imperfective, it is constrained to time intervals that include ST

Predicates in the perfective cannot be true at ST, therefore, **null perfect aspect** is inserted to fix the structure:

$$(25) \llbracket \text{PRF} \rrbracket = \lambda P \lambda t'. \exists t [P(t) \ \& \ XN(t, t')], \text{ where } XN(t, t') = 1 \text{ iff } t' \text{ is final subinterval of } t$$

Against null Perfect

Problems:

- ◆ Whatever the right account of the perfect is, it needs an **additional recency requirement**
- ◆ Null Perfect is **redundant** and no more than a stipulation
- ◆ This line of inquiry fails to cover the ‘grey zone’: there is a need to postulate different systems, one where perfect fixation is based on aspect and one where perfect fixation is based on Aktionsart

Graded tense

The **remoteness** constraint is proven to exist in various languages (Cable 2013, Mucha 2016, Johnson 2022)

(26) $\llbracket \text{PST} \rrbracket = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$

Unrestricted past

(27) $\llbracket \text{AOR} \rrbracket = \lambda P \lambda t. \exists t' [t' \leq t \wedge t' \subseteq \text{today} \wedge P(t')]$
non-future

Restricted

But! it fails to give a key prediction that is needed for Forest Nenets data:

◆ the aspectual split

Pronominal vs. Existential Tense

The contrast between **pronominal** and **existential** past tenses has been used to account for existence of two past-referring tenses (Chen et al. 2021)

(28) $\llbracket \text{PST} \rrbracket = \lambda P \lambda t. \exists t' [t' < t \wedge P(t')]$

Existential

(29) $\llbracket \text{AOR} \rrbracket = \lambda t. [g(t_i) \leq t]$

Pronominal

Problems:

- ◆ No aspectual split
- ◆ No remoteness contrast
- ◆ Both can be used in narrative progression, which is contrary to expectation from the given contrast

Summary

◆ Forest Nenets **AOR** and **PST** have overlapping temporal reference

◆ **AOR acts as either present tense or recent past** depending on the aspectual characteristics of the predicate

◆ We have shown that the contrast between PST and AOR can be accounted in two ways:

- **pragmatic competition-based account**

cons: potential complications with QUD

- **lexical semantics-based account**

cons: Occam's razor, additional ontological assumptions

◆ Other accounts do not cover the Forest Nenets data completely

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