

# *Update semantics for Komi-Zyrian past tense morphemes*

Dasha Popova, HSE

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## 1 Introduction

- The empirical focus of the study are the first past tense and the second past tense morphemes in Komi-Zyrian.
- Komi-Zyrian is a Uralic Permic language.
- The data I report here was collected in the Muzhi village (Yamalo-Nenets Autonomous Okrug, Russia) and in the Kazym town (KhMAO, Russia).
- The data represents the Muzhi variant of the Izhma dialect of Komi-Zyrian.
- **The main contrast:**
- (1) *Van'a kerka-yn abu uz'-ema*  
Vanja house-ESS NEG sleep-PAST2  
[It seems/I've been told that] Vanja didn't sleep at home.
- (2) *Van'a kerka-yn iz uz'*  
Vanja house-ESS NEG.PAST1.3 sleep  
[Usually: as I have witnessed myself] Vanja didn't sleep at home.
- Plan for today:
  - examine the evidential contrast in (1)-(2);
  - determine the status of the evidential inferences;
  - provide an account of the evidential contrast using the machinery of the update semantics.

## 2 The evidential contrast

- Komi-Zyrian has been reported to have two past tense morphemes *-i* (PAST1) and *-ema* (PAST2) (Leinonen, 2000; Siegl, 2004).
- Both morphemes are used to describe events that took place before the utterance time.
- The second past tense morpheme *-ema* has a more restricted distribution than the first past tense morpheme *-i* that can be used to describe any past event.
- In what follows, I focus on the resultative contexts where both morphemes can be used and thus, compete with each other.

<p>(3) <i>ponm-ys</i>      <i>pyšj-i-s</i>  dog-POSS3SG    run.away-PAST1-3SG  The dog ran away.</p>	<p>(4) <i>ponm-ys</i>      <i>pyšj-ema</i>  dog-POSS3SG    run.away-PAST2  Apparently {as I infer/as I heard},  the dog ran away.</p>
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- The sentence in (4) illustrates that the second past tense morpheme is used when the speaker has only indirect (note the use of *apparently* in the English translation) evidence for the described event.
- In (4), the speaker either infers that the dog ran away, e.g., from the fact that the dog house is empty, or acquires the information via hearsay.
- The use of the second past morphology in (4) suggests that the speaker didn't observe the event directly: didn't hear or see the dog running away.
- In contrast, the use of the first past tense morphology (3) usually (but not necessarily) conveys that the speaker witnessed the event directly.
- The source of evidence can be explicitly specified in the sentence.
- (5) provides an example of an inferential indirect source of evidence; (6) provides an example of the hearsay indirect source of evidence:

(5) *gəgər*    *luža*    *vojnas*                    *zer-ema*  
around    puddle    during.the.night    rain-PAST2  
There are puddles around, it must have rained during the night.

(6) *vis'tal-e-nys*    *pet'a*    *gətras'-ema*  
say-PRES-3PL    pet'a    marry-PAST2  
They say that Petja got married.

- The occurrence of the first past tense morphology in resultative contexts usually signals that the speaker witnessed the event directly.
- The first past tense counterparts of the examples considered above usually signal that the speaker saw or heard the rain during the night; that the speaker attended Petja's wedding.

(7) *vojnas*                      *zer-i-s*  
 during.the.night rain-PAST1-3SG  
 It rained during the night.

(8) *pet'a gətras'-i-s*  
 pet'a marry-PAST1-3SG  
 Petja got married.

- It should be noted, however, that the first past tense morphology is the default and can replace the second past tense morphology even in cases like (5) and (6).
- Given what we have said so far about the second past tense morphology, we would not expect it to co-occur with the first person subject.
- However, the second past tense morphology can co-occur with the first person subject.
- The second past tense morphology can appear with the first person subject when the speaker witnessed the event directly, but realized that the event occurred/acquired evidence for the occurrence of the event after the event ended.
- This can happen when, e.g., the speaker was drunk or the speaker was a very little child at the time the event took place.

(9) *me vəl-i*                      *gaža*    *us'-ema*                      *valuža*  
 I    be-PAST1.1SG drunk fall.down-PAST2 puddle  
 When I was drunk, I, [apparently], fell into a puddle.

(10) *dol'anam*                      *me us'-l-ema*                      *va*  
 in.my.childhood I    fall.down-ASP3-PAST2 water  
 In my childhood, I, [apparently], fell into the water [into the river].

- This suggests that the Komi-Zyrian evidentiality system is sensitive to when the proposition expressed by the sentence was learned by the speaker, not to whether or not the speaker witnessed the described event.
- Summing up,
  - In resultative contexts, the first past tense morphology and the second past tense morphology compete with each other.
  - The use of the second past tense morpheme signals that the speaker has indirect (inferential or hearsay) evidence for the described event.
  - **The indirect evidence inference can be tied to the fact that the speaker learns about the event described by the scope proposition after the event took place.**
  - The use of the first past tense morpheme usually (but not necessarily) signals that the speaker witnessed the event directly.

### 3 Speaker commitment to the scope proposition

- The sentence below expresses two propositions.

(11) *ponm-ys pyšj-ema*  
 dog-POSS3SG run.away-PAST2

Apparently {as I infer/as I heard}, the dog ran away.

*Scope proposition:*  $p$  = the dog ran away

*Evidential proposition:* The speaker heard/inferred that  $p$ .

- While there is a general consensus in the literature that the utterer of an evidential sentence is fully committed to the evidential proposition, there is no consensus about the degree to which the speaker is committed to the scope proposition.

- The two competing views on the strength of the scope proposition:

(12) a. *Modal view:*  $\llbracket EV(p) \rrbracket = \langle \mathbf{must}(\llbracket p \rrbracket), \mathbf{indir.evid}(\mathbf{speaker}, \llbracket p \rrbracket) \rangle$   
 b. *Non-modal view:*  $\llbracket EV(p) \rrbracket = \langle \llbracket p \rrbracket, \mathbf{indir.evid}(\mathbf{speaker}, \llbracket p \rrbracket) \rangle$

- For a similar Bulgarian data set, Koev (2011) adopts a non-modal view, while Izvorski (1997) adopts the modal view.

- The modal view is motivated by the observation that the presence of the evidential marker may have a weakening effect on the speaker's commitment to the scope proposition.

- Based on the following observations, I will argue for the non-modal view on the Komi-Zyrian data.

- First, typically, the speaker cannot explicitly deny their commitment to the scope proposition in the following discourse.

- The sentence in (11) cannot be typically followed by, e.g., *but I don't think/but I doubt that the dog ran away*.

- Second, when embedded under an attitude verb, the alleged weakening effect of the evidential disappears.

(13) *masha vis'tal-i-s pet'a gətras'-ema*  
 masha say-PAST1-3SG pet'a marry-PAST2

a. Masha said that Petja got married.

b. #Masha said that Petja must have gotten married.

- Third, the level of speaker's commitment to the scope proposition is highly context-dependent.

- The level of speaker's commitment can vary based on the reliability of the source of evidence.

- Thus, in what follows I will adopt the non-modal view (12) on sentences like (11).

## 4 The status of the evidential proposition

- In this section I will examine the discourse behavior of the evidential proposition and its projection properties.

- (14) *ponm-ys pyšj-ema*  
dog-POSS3SG run.away-PAST2

Apparently {as I infer/as I heard}, the dog ran away.

*Scope proposition:*  $p$  = the dog ran away

*Evidential proposition:* The speaker heard/inferred that  $p$ .

- Sentences like (14) introduce two propositions.
- Evidential sentences do not impose preconditions on the input context the way pre-supposition triggers do.
- Both propositions are thus informative, introduce discourse-new information.
- While some informative propositions are proposals in a sense that the speaker proposes to discuss their content, other informative propositions are impositions in a sense that the speaker does not intend to discuss them (e.g., Simons et al., 2010; AnderBois et al., 2013).
- Proposals are expected to be questioned/negated in the following discourse and do not project.
- Impositions are not expected to be questioned/negated in the following discourse and do project, they are preserved when their triggers are embedded under entailment-canceling operators such as negation, modals.
- Evidential proposition cannot be negated or questioned in the following discourse.
- The sentence in (14), for example, can be followed by (15a), but not by (15b):

(15) a. It's not true that the dog ran away.

b. #It's not true that the speaker heard/inferred that the dog ran away.

- Evidential proposition projects past negation:

- (16) *Van'a kerka-yn abu uz'-ema*  
Vanja house-ESS NEG sleep-PAST2

[As I can infer/As I've been told/Apparently] Vanja didn't sleep at home.

- Although the data in this section is rather limited, we observed that the evidential proposition introduces discourse-new information that cannot be negotiated in the following discourse and projects past negation.
- I thus classify it as an informative, but non-negotiable update of the common ground, an imposition. (AnderBois et al., 2013)

## 5 Update semantics for the two past tense morphemes

- (17) *ponm-ys*      *pyšj-ema*  
dog-POSS3SG   run.away-PAST2  
Apparently {as I infer/as I heard}, the dog ran away.  
*Scope proposition:*  $p$  = the dog ran away  
*Evidential proposition:* The speaker heard/inferred that  $p$ .
- So far, we found that the evidential proposition is an imposition (a non-negotiable informative update);
- that the scope proposition is a proposal (a negotiable informative update)
- and that the indirect evidence inference can be tied to the fact that the speaker learns about the event described by the scope proposition after the event took place.
- In the spirit of the analysis proposed for similar Bulgarian data in (Koev, 2011; Koev, to appear) I sketch the following analysis of (17):
  - (18) a. Proposal:  $\exists x \wedge \text{dog}(x) \wedge \exists e \wedge \text{run.away}(e, x) \wedge \tau(e) < \tau_u$
  - b. Imposition:  $\exists e_1 \wedge \text{learn}(e_1, sp_u, p) \wedge \tau(e_1) \wedge \tau(e) < \tau(e_1)$ , where  $sp_u$  is the speaker,  $\tau_u$  is the time of utterance,  $p$  is the scope proposition
- What about the first past tense morphology?
- Recall that the first past tense morpheme does not encode the source of evidence: it is compatible with direct, as well as with indirect source of evidence.
- For example, (19) can be followed by *as I saw myself*, as well as by *as I infer/as I heard*.
  - (19) *ponm-ys*      *pyšj-i-s*  
dog-POSS3SG   run.away-PAST1-3SG  
The dog ran away.  
Proposal:  $\exists x \wedge \text{dog}(x) \wedge \exists e \wedge \text{run.away}(e, x) \wedge \tau(e) < \tau_u$
- Yet, it does typically carry a direct evidence inference.
- My Proposal: this inference is a conversational implicature that arises due to the fact that the speaker could have used the second past tense morphology that encodes indirect source of evidence, but chose not to.

## 6 Conclusion

- We have examined the evidential contrast between the first and the second past tense morphemes in Komi-Zyrian.
- We found that the evidential proposition associated with the second past tense morpheme is an imposition (a non-negotiable informative update).
- We found that the evidential proposition associated with the first past tense morpheme is a conversational implicature.
- We proposed an analysis where the indirect evidence inference can be tied to the fact that the speaker learns about the event described by the scope proposition after the event took place.

## References

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