





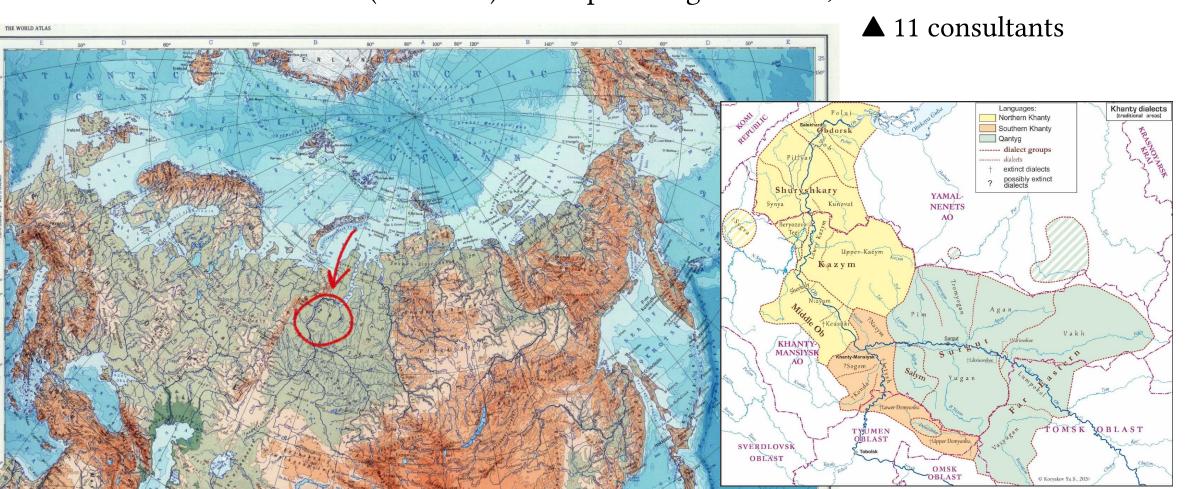


WMUL, April 21st 2023

#### Kazym Khanty, a dialect of Northern Khanty (Uralic>Khantic)

▲ Russia, Khanty-Mansi Autonomous Okrug, Kazym village

▲ 4 (collective) fieldtrips during 2021-2023, Russian as contact



# Methodology



- ▲ elicitation via **small stories around 3-4 sentences**, translated sentence-by-sentence
  - contextual elicitation, but **dialogue-like** context is in Khanty
  - "can you say it this way" slight modification in the target sentence
    - + asking consultants to repeat the whole thing
- ▲ + occasional strings of narrative elicitation (Burton, Matthewson 2015; Louie 2015)
  - but! embeddings not good *Masha said that X* involves non-finite forms
- (1) [A: Where was Borya yesterday? He disappeared.
  - B: No idea. Did he have any urgent business?
  - A: Well, his exams are coming up]
  - λ<del>u</del>w mosəŋ λ<del>u</del>ŋətti χοt-ən tăλaŋ χαtəλ we-s
  - (s)he maybe read-NFIN.NPST house-LOC entire day be-PST[3SG]
  - B: 'He might have spent the whole day at the library'.

# The puzzle



**▲ epistemic necessity**: non-finite form + 'deed' + copula

$$V-\frac{ti}{\partial m}$$
 wer wo- $\frac{\lambda}{s}$ 

$$V$$
-nfin $\frac{npst}{pst}$  deed be- $\frac{npst}{pst}$ 

(2) [A: Where is grandma?

B: Dunno. Well, her bag is not here, her shoes as well]

λ<del>u</del>w λapkaj-a măn-**əm wεr we-λ** 

(s)he shop-DAT go-NFIN.PST deed be-NPST[3SG]

'She must've gone shopping'

two variables!!

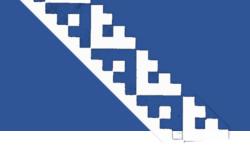
- ▲ Copula in (N)PST
- ▲ Non-finite form in NFIN.(N)PST
- ▲ what do they encode?

#### A note on Khanty



- ▲ Finite tenses past(PST) and nonpast (NPST)
- ▲ no Sequence of Tense
- ▲ no regular aspectual markers
- ▲ Non-finite "tenses" NFIN.NPST/NFIN.PST used in relative clauses, sentential arguments, purpose clauses, temporal adjuncts, mirative forms... (Bikina et al. 2022)
- ▲ non-finite forms with 'deed' can be used as sentential arguments of some verbs (Starchenko 2019)
- (3) puχ juχət-əm wεr ma wθ-λ-εm boy come-NFIN.PST deed I know-NPST-1SG 'I know that the boy came' (Bikina et al. 2022)

#### Idea



(Condoravdi 2002):

▲Temporal perspective (TPe) – time at which the modal base is evaluated (in our case, the time at which the relevant epistemic state is valid)

▲ **Temporal orientation** (TO) – the temporal relation between the TPe and the prejacent

▲ initial idea: **TPe** is encoded by the **finite tense of the copula TO** is encoded by the **non-finite tense of the prejacent** 

▲ past TPe for epistemics is possible – (Rullmann & Matthewson 2018)

# present TPe, present TO



(5) [Sasha sometimes leaves some candy in the closet as a stash. She and her friend are having tea, but there are no candy on the table.

S: Look in the closet.

Fr: What for?]

śăta maw weλ-**ti** wer we-λ

there candy be-NFIN.NPST deed be-NPST[3SG]

S: 'There must be some candy in there' [#but I'm not sure]

	fut/pres TO	past TO
present TPe	V-ti wεr wθλ	V-əm wεr wөλ
past TPe	V-ti wɛr wəs	V-əm wɛr wəs

## present TPe, future TO



(4) [I see Masha approaching the bus stop from one side and Borya – from the other]

mašaj-en boraj-en piλa avtobus-a oməs-ijəλ-ti

χăr-ən

wejtant-ti

M.-Poss.2sg B.-poss.2sg with bus-dat sit-freq-nfin.npst open\_place-loc meet-nfin.npst

wer-ən wθ-λ

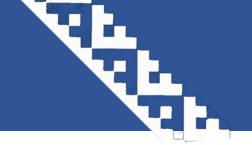
deed-POSS.2DU be-NPST[3SG]

'Masha and Borya must meet at the bust stop (literally: at the place where you sit on the bus)'

▲ (circumstantial?)

	fut/pres TO	past TO
present TPe	V-ti wεr wθλ	V-əm wεr wөλ
past TPe	V-ti wɛr wɵs	V-əm wer wөs

### present TPe, past TO



(6) [We saw Masha on the street and she seemed unusually happy. A: I wonder why is she so happy.]

waśaj-en pi $\lambda$ a wejtant-ij $\lambda$ -əm wer we- $\lambda$  śit păt-a V.-POSS.2SG together meet-FREQ-NFIN.PST deed be-NPST[3SG] that for-DAT ampətət' $\lambda$ 'ə-ij $\lambda$ ?

rejoice-FREQ.NPST[3SG]

B: 'She must've met Vasya - why else would she be so happy?'

	fut/pres TO	past TO
present TPe	V-ti wεr wθλ	V-əm wεr wθλ
past TPe	V-ti wɛr wɵs	V-əm wer wөs

## past TPe, present TO



(7) [Sasha sometimes leaves some candy in the closet as a stash. She and her friend are having tea when Sasha suddenly leaves to rummage in the closet.

Friend: Why were you rummaging in the closet?]

śata maw wθλ-**ti** 

wer wo-s

pa

antem

there candy be-NFIN.NPST deed be-PST[3SG] ADD NEG.EX

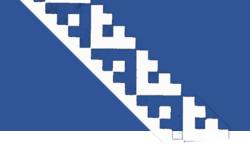
S: 'There could've been some candy but there are none.'

(basically an ice-cream example

from (von Fintel & Gillies 2008))

	fut/pres TO	past TO
present TPe	V-ti wεr wθλ	V-əm wεr wөλ
past TPe	V-ti wer wos	V-əm wer wөs

### past TPe, present TO



(8) [A: Why did you carry flowers around yesterday?

B: You know, Masha adores flowers. I gathered some for her]

ma noməs -əm min ostanovkaj-ən wojtant-ijəλ-**ti** 

wer-emən

WO-S

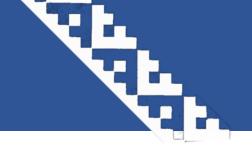
I think.PST-1SG we.DU bus\_stop-LOC meet-FREQ-NFIN.NPST deed-POSS.1DU be-PST[3SG]

'I thought we were supposed to meet at the bus stop'

[but Masha got sick and I had to carry the flowers all day long]

	fut/pres TO	past TO
present TPe	V-ti wεr wθλ	V-əm wεr wθλ
past TPe	V-ti wer wos	V-əm wer wəs

## past TPe, past TO



(9) [Why were you calling out at Borya's windows for the whole evening yesterday? He wasn't at home] ma nomos-om λωw juχi juχot-om wer-(oλ) wo-s
 I think.PST-1SG (s)he home come-NFIN.PST deed-(POSS.3SG) be-PST[3SG]
 'I thought he must've been home by then.'

	fut/pres TO	past TO
present TPe	V-ti wεr wθλ	V-əm wεr wөλ
past TPe	V-ti wɛr wɵs	V-əm wer wos

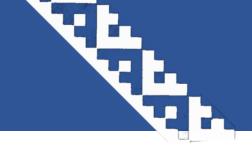
# Partial system



- ▲ 5 of 11 consultants do not allow NFIN.PST at all
  - → all of its functions are covered by finite past instead
- ▲ PST for both past TPe and past TO

	fut/pres TO	past TO
present TPe	V-NFIN.NPST deed be-NPST	V-NFIN.NPST deed be-PST
past TPe	V-NFIN.NPST deed be-PST	V-NFIN.NPST deed be-PST

### Partial system



#### -- past TPe, past TO

(10) [Why were you calling out at Borya's windows for the whole evening yesterday? He wasn't at home.]

ma noməs-əm λωw juχi juχət-**ti** wɛr-(əλ) wo-**s**I think.PST-1SG (s)he home come-**NFIN.NPST** deed-(POSS.3SG) be-**PST**[3SG]
'I thought he must've been home by then.'

- ▲ quite possibly influence of Russian
- **▲** grammaticalization?
- ▲ not due to age difference or influence of other dialects

## Beyond the wer



- ▲ several other modal nominal constructions of the type V-NFIN+ NOUN + copula
- ▲ dynamic, circumstantial, bouletic
- $\triangle$  can't have NFIN.PST due to the Diversity condition (need both p and  $\neg p$  worlds in the modal base) (Condoravdi 2002)
- (11) [Masha has a younger brother and she often has to babysit him. But yesterday he was staying at Grandma's and Masha was free for the whole day]
  - \*muλχatəλ mašaj-en woš-a măn-əm śir tăj-əλ
  - yesterday M.-POSS.2SGcity-DAT go-NFIN.PST ability have-NPST[3SG]
  - 'Yesterday Masha could go to the city'

#### Circumstantial wer-constructions



- ▲ circumstantial + pst = counterfactual (Condoravdi 2001)
- (12) λων χωνοη măn-**ti** wεr-əλ wθ-**s** tθp bilet-əλ wθtšə-s-λε (s)he long\_ago go-**NFIN.NPST** deed-POSS.3SG be-**PST**[3SG] only ticket-POSS.3SG lose-PST-3SG>SG 'She would've left long ago, but she lost the ticket'
- ▲ similar with Khanty conditionals with PST being the only CF-marking
- (13) tămχatəλ rutśə-ti χatəλ wo-s ki muj (λολən) năŋ wɛr-s-en? today rest-NFIN.NPST day be-**PST**[3SG] if what (IRR) you.SG do-**PST**-2SG 'What would you do if today was a holiday' (uttered on Tuesday)
- ▲ if we assume conditionals are both epistemic and circumstantial (Khoo 2015)
- $\triangle$  epistemic MB + PST = past indicatives
- ▲ circumstantial MB + PST = subjunctives

# Weakening?



- ▲ copula in PST, as in past TPe, can convey uncertainty
- (14) śăta maw wθλ-**ti** wεr wθ-**s** there candy be-NFIN.NPST deed be-PST[3SG]
  - S: 'There may be some candy in there' [but I'm not sure]

(Rullmann & Matthewson 2018) notice something similar with English had to

**▲**is it an implicature?

# Weakening



(15) [A: Where were Vasya? We lost him yesterday

B: No idea.]

#kinška λ<del>u</del>ŋət-ti χοt-ən wθλ-ti wεr-əλ wθ-s book read-NFIN.NPST house-LOC be-NFIN.NPST deed-POSS.3SG be-PST[3SG]

χοt-a jăŋχ-ti wɛr-əλ wθ-s

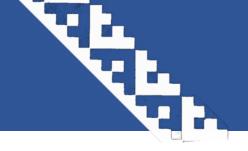
house-dat go-nfin.npst deed-poss.3sg be-pst[3sg]

Intended: 'He might've been in the library and he might've been visiting (someone)'

Consultant: as if he were in two different places at the same time

▲ apparent weakening does not change the quantification

#### Links



- 1. Bikina, D., Rakhman, D., Potseluev, V., Starchenko, A., & Toldova, S. Non-finite constructions in Khanty: their unity and diversity // Folia Linguistica. 2022.
- 2. Condoravdi C. Temporal interpretation of modals-modals for the present and for the past // The construction of meaning. 2001.
- 3. Louie M. The problem with no-nonsense elicitation plans (for semantic fieldwork) // Methodologies in semantic fieldwork. 2015. P. 47-71.
- 4. Rullmann H., Matthewson L. Towards a theory of modal-temporal interaction // Language. Linguistic Society of America, 2018. Vol. 94, № 2. P. 281–331.
- 5. Von Fintel K., Gillies A.S. Must... stay... strong! // Nat. Lang. Semant. Springer, 2010. Vol. 18, № 4. P. 351–383.