

# Structuring Itelmen Word Order

Jonathan David Bobaljik  
Harvard University

Universität Wien

21 June 2024



# Introduction

- (S)OV and (S)VO order are well-attested in Itelmen
- What conditions the alternation?
- Small text/corpus study
- Implications for Itelmen (morpho)syntax
- Implications for approaches to syntax of focus/new/given
- Consideration of (functional) alternatives





## Itelmen [itl]

- Chukotko-Kamchatkan, Kamchatka peninsula, Russia
- 1990s ~ 80 speakers
- now handful of varying proficiency:
  - 1 completely fluid, native; others varying - revitalization
- all speakers bilingual, Russian-dominant since 1950s or earlier

# Acknowledgments



T. N. Bragina



L. E. Pravdoshina



Susi Wurmbrand

Stats help: Kate Davidson,  
Steven Worthington (Institute  
for Quantitative Social Science,  
Harvard)



Social Sciences and Humanities  
Research Council of Canada

Conseil de recherches en  
sciences humaines du Canada

Canada



E. E. Silina



A. D. Ivashova

## OV~VO:

- (1) sčas kma **miṭ knin** **i?** t'-il-aṭ-čen. OV  
 now 1SG all 2SG.POSS water 1SG-drink-FUT-1>3SG

‘I will drink up all your water.’ [AS (37)]

- (2) k'-il-ʔin=(n)in **miṭ kəṭx<sup>w</sup>-čax.** VO  
 PRT-drink-TRANS.PRT=3CL all lake-DIM

‘She drank up all the little lake.’ [AS (38)]



- subject and object **cross-referenced on verb**
- no case marking on subj, obj
- arguments freely omitted

(1) sčas kma miɫ knin iʔ t'-il-aɫ-čen.  
 now 1sg all 2sg.POSS water 1sg-drink-FUT-1>3sg  
 'I will drink up all your water.' [AS (37)]

(2) k'-il-ʔin=(n)in miɫ kəɫx<sup>w</sup>-čax.  
 PRT-drink-TRANS.PRT=3CL all lake-DIM  
 'She drank up all the little lake.' [AS (38)]



# Four Texts

|    | Title              | Stroyteller             | Genre     |
|----|--------------------|-------------------------|-----------|
| 1. | Wingless Gosling   | Tatiana N. Bragina      | Myth/Tale |
| 2. | Old Man            | Lyudmila E. Pravdoshina | Event     |
| 3. | Kutkh and the Mice | Ekaterina E. Silina     | Myth/Tale |
| 4. | Tilval             | Agrafena D. Ivashova    | Legend    |

- ~900 clauses (of which ~300 transitive)
- Sedanka-Tigil (Northern) dialect
- recorded 1994, transcr. & edited with speakers
- Speaker 1 \*1906, Speakers 2-4 \*1934-1942.

# Methodology 1: Coding for IS

$O_{new}$  referent not previously mentioned in discourse

**or** explicitly contrastive ( $n=6$ ) cf. *focus*

$O_{old}$  referent previously mentioned in discourse (=given)

1st and 2nd person always given

- dialogues within a story are new discourses
- Complications:
  - finer-grained: salience, accessibility, etc
  - focus  $\neq$  new
  - part-whole: X's hand, door of house, etc.
  - common ground via world knowledge (chapel in village, etc)



# Four Texts

|                  |     |     |     |    |           |
|------------------|-----|-----|-----|----|-----------|
| INTRANSITIVE     | V   | SV  | VS  |    | Total     |
|                  | 304 | 236 | 36  |    | 576       |
| TRANSITIVE       |     |     |     |    | SubTotals |
| no S,O           | V   |     |     |    |           |
|                  | 58  |     |     |    | 58        |
| 1 NP             | SV  | VS  | OV  | VO |           |
|                  | 16  | 4   | 105 | 65 | 190       |
| S>O              | SOV | SVO | VSO |    |           |
|                  | 34  | 21  | 3   |    | 58        |
| O>S              | OSV | OVS | VOS |    |           |
|                  | 7   | 4   | 0   |    | 11        |
| TOTAL TRANSITIVE |     |     |     |    | 317       |

Table 1: Constituent Order (raw)

## Methodology 2: Coding for S,O,V

Three points of indeterminacy:

1. Coordination or separate clauses?
2. Perception verbs (NP as O or S)?
3. N-construction (“passive”/impersonal)

# Indeterminacy 1: Counting clauses

- (5) aŋaqa-čχ k-φti-knen k-ŋrep-qzu-knen  
 Angaqa-DIM PRT-remain-PRT PRT-sing-ASP-PRT

‘Angaqa remained and (he) sang’ [AS (25)]

- a. [<sub>CP</sub> Angaqa remained ] & [<sub>CP</sub> pro sang ]

SV & V

- b. [<sub>CP</sub> Angaqa [<sub>VP</sub> remained ] & [<sub>VP</sub> sang ] ]

SV & SV



## Indeterminacy 2: Perception (and similar) verbs:

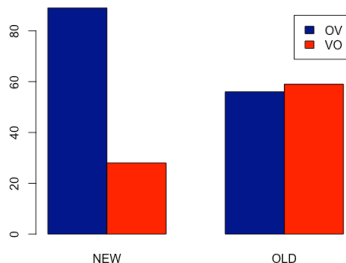
- (6) k'-əɬčku-in=(n)in      tsxal-astas    k-k'oɬ-knen  
 PRT-see-TRNS.PRT=3CL fox-AUGM    PRT-come-PRT  
 'He saw a fox coming.' [AS (28)]
- a. [ saw    fox<sub>i</sub> ] [ (it<sub>i</sub>) came ]      NP-complement  
 b. [ saw [ fox                    come ] ]      clausal-complement

- (True) clausal complements always post-verbal (in texts)

### Strategy:

- raw count: include perception O (and N-construction)
- adjusted count: exclude perception O (and N-construction)

# Raw counts (before refinements)



**Table 2:** All texts OV/VO  $\times$  old/new (raw)  
(Fisher's Exact  $p < .0001$ )

|           | OV  | VO | Total |
|-----------|-----|----|-------|
| $O_{new}$ | 93  | 31 | 124   |
| $O_{old}$ | 57  | 58 | 115   |
| Totals    | 150 | 89 | 239   |

**Table 3:** Text 1 (raw) (Fisher's Exact  
 $p = 0.02533$ )

|           | OV | VO | Total |
|-----------|----|----|-------|
| $O_{new}$ | 12 | 5  | 17    |
| $O_{old}$ | 3  | 9  | 12    |
| Totals    | 15 | 14 | 29    |

## First Result

- $O_{new}$  mostly pre-verbal (3:1)
- $O_{old}$  variation
  - for oldest speaker,  $O_{old}$  mostly post-verbal

Broadly consistent with (S)OVx languages, opposite of (S)VO

- Turkish (OV) (Kural, 1997; Kornfilt, 2005; Şener, 2010):
  - preverbal focus, *O<sub>old</sub>* scrambled (L or R)
  - postverbal constituents must be background (given, non-topic)\*
- also: Amharic, Quechua, Siouan, Khanty (older), (Borise et al., 2024)
- cf.: Hindi/Urdu - de-emphasis (Gambhir, 1981; Butt & King, 1997)  
= Tail (Vallduví, 1992)
- Russian (VO) (Dyakonova, 2009; Bailyn, 2012; Titov, 2012):
  - Right Focus: new information focus occurs clause-finally (IK1)
  - *O<sub>old</sub>* may but need not front (also contrastive focus)

Various qualifications to make here (Borise et al., 2024)

## Turkish: SOV, unmarked? intonation

- (7) I know that my wife asked Pelin, Pinar, and Can each to read Orhan Pamuk's "White Castle" in her class last week. I ask her today:

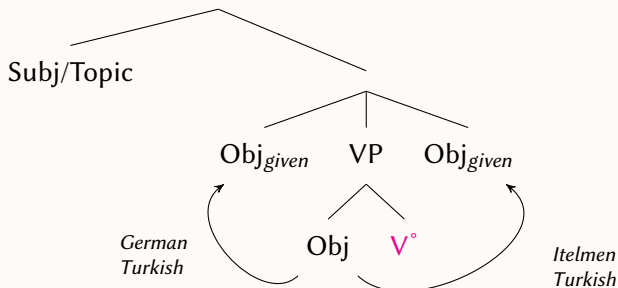
A: What happened with that reading assignment from last week?

- (8) B:

- a. # Yalnızca Pelin **kitab-ı** oku-muş. SOV  
only Pelin book-ACC read-PAST
- b. **Kitab-ı** yalnızca Pelin oku-muş. OSV  
book-ACC only Pelin read-PAST
- c. Yalnızca Pelin oku-muş **kitab-ı**. SVO  
only Pelin read-PAST book-ACC  
'Only Pelin read the book.'

(Şener, 2010, see also Kural, 1997; Kornfilt, 2005)

# OV/VO and information structure



Default prosodic prominence on nuclear VP (Jackendoff, 1972; Schmerling, 1976  
 ...Kratzer & Selkirk, 2020; Borise et al., 2024; cf. Szendrői, 2017)

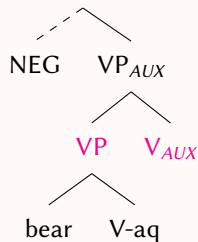


# Itelmen VP is head-final (I)

Negation: NEG ... V-(k)aq ... AUX

- (9) qaʔm βeqaʔnɫ ɬəm-aq tʻ-iɫ-čen  
 NEG bear kill-NEG 1SG.-AUX-1>3SG  
 ‘I didn’t kill (a) bear.’ [S3:9]

- (10) a. \* tʻ-iɫ-čen qaʔm ɬəm-aq  
 1SG-AUX-1>3SG NEG kill-NEG  
 b. \* qaʔm tʻ-iɫ-čen ɬəm-aq  
 NEG 1SG-AUX-1>3SG kill-NEG  
 ‘I didn’t kill it.’ [S3:9]



see also Abramovitz (2019) on Koryak  
 caveat re: Volodin (1976, 275)

## Itelmen VP is head-final (II)

Predicate complements to *le-* ‘become’  
(including predicate nominals (b)):

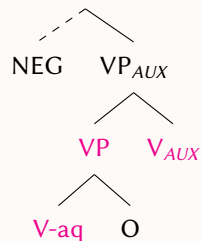
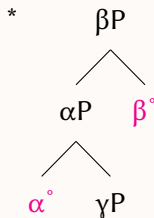
- (11) a. qat      **laq-aq**      k-le-qzu-knen.  
 already cold-ADV PRT-become-ASP-PRT  
 ‘Already it was becoming cold.’ [AS (5)]
- b. qat      A.S. **li**      **p-lax**      **qsas**      k’-le-knen  
 ALREADY A.S. very big-ADJ goose PRT-become-PRT  
 ‘A.S. had already become a very big goose, ...’ [AS (94)]

# Itelmen VP is head-final (III)

Complex predicates (light verbs):

- (12) a. **xaq** tʃi-ʔn k-**təl**-knen  
 know 3PL-PL PRT-AUX-PRT  
 ‘They recognized (lit: knew) him.’ [TN (63)]
- b. jurte-čχ **ənluʃi-ʃ** k’-**ite**-ʔin  
 yurt-DIM enflame-INST PRT-AUX-PRT  
 ‘(They) burned the little yurt.’ [KL (118)ʹ]
- c. noz-əʔn knank **napravit** t’-**iʃ**-če-ʔn  
 dried.fish-PL 2SG.DAT prepare(<*Russ.*) 1SG-AUX-1>3-PL  
 ‘I’ve prepared jukola (dried fish) for you.’ [KL:15]

if... V,O flexible, but VP-Aux head-final  
 then... FOFC violation (Biberauer et al., 2014)



# An indirect argument for high VO<sub>Old</sub>

Biberauer et al. (2014): In many V-final languages, CP complements follow V

Headedness parameters (counterfactual):

|        |                            |
|--------|----------------------------|
| VP-AUX | head-final AuxP            |
| DP-V   | head-final VP              |
| V-CP   | but CP complement to right |

Predicts [ [ V O<sub>CP</sub> ]<sub>VP</sub> AUX ]

False! Unattested.

∴ [V CP] order involves extraposition, not complement on right

# An indirect argument for high VO<sub>Old</sub>

Elicitation (with Susi Wurmbrand):

(13) βeqaʔnʲɬ ‘bear’:

|     |      |     |          |     |                |     |
|-----|------|-----|----------|-----|----------------|-----|
| <1> | qaʔm | <2> | ɬəm-aq   | <3> | tʰ-iɬ-čen      | <4> |
|     | NEG  |     | kill-NEG |     | 1SG.-AUX-1>3SG |     |

‘I didn’t kill (the/a) bear.’ [S3:9-10]

<2> preferred

<1,4> acceptable

<3> very hesitantly acquiesced but in ‘repeating’ switched to <2>

# An indirect argument for high VO<sub>Old</sub>

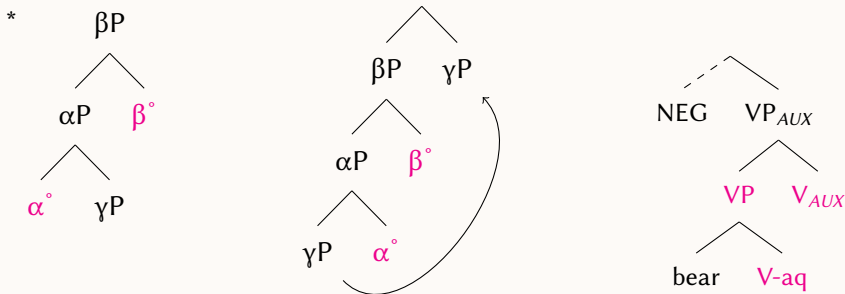
Texts:

- one occurrence of [ V O Aux ] in recordings (Lt. Vb)
- but auxiliary omitted in edited version V O

Tentative conclusion: \* V O Aux

# An indirect argument for high VO<sub>Old</sub>

- FOFC compliant
- Unexpected, if O in [VO] within VP
- Suggests that VO is (high) extraposition of O.



NB: Although the reasoning follows Biberauer et al. (2014), the motivation for finite CP extraposition in FOFC does not extend to the Itelmen VO derivations.



# Interim conclusions

- Itelmen is an OV language, VO is derived
- *O<sub>old</sub>* extraposes optionally (upward movement of +given)
- VO not (just) a Russian calque (contra Ono, 2021, others)
- Possibly old:
  - suffixal O agreement < pronouns
  - ∴ post-verbal O for non-focus O was possible order
  - cf. Comrie (1980) on Mongolic

## Aside: object suffixes < old VO order

- (14) **kma** n-oms-qzu-**βum**  
 1SG N-leave-ASP-3>1SG  
 ‘I was left behind.’ [AS (46)]

- suffixal O agreement < pronouns
- ∴ post-verbal O for non-focus O was possible order
- cf. Comrie (1980) on Mongolic

| Itelmen                     |          |
|-----------------------------|----------|
| O-AGR                       | PRON     |
| n-oms-qzu- <b>βum</b>       | kma      |
| Vol 76: -γ <sup>w</sup> ö̆m | S: kəmma |

| Chukchi           |            |
|-------------------|------------|
| ne-ʈu- <b>γəm</b> | <b>γəm</b> |

# First results:

- $O_{new}V$
- $O_{old}V \sim VO_{old}$  (why diff?)
- Itelmen patterns with OV languages (**extraposition**)
- not (just) Russian influence (Ono, others)
- Itelmen uses VO more than in Turkish, why?

Table 4: All texts OV/VO  $\times$  old/new (raw)

|           | OV  | VO | Total |
|-----------|-----|----|-------|
| $O_{new}$ | 93  | 31 | 124   |
| $O_{old}$ | 57  | 58 | 115   |
| Totals    | 150 | 89 | 239   |

Table 5: Text 1 (raw)

|           | OV | VO | Total |
|-----------|----|----|-------|
| $O_{new}$ | 12 | 5  | 17    |
| $O_{old}$ | 3  | 9  | 12    |
| Totals    | 15 | 14 | 29    |

# Perception (and similar) verbs:

- (15) k'-əłčku-in=(n)in      tsxal-astas      k-k'ot-knen  
 PRT-see-TRNS.PRT=3CL fox-AUGM      PRT-come-PRT

‘He saw a fox coming.’ [AS (28)]

- |                                                            |                    |
|------------------------------------------------------------|--------------------|
| a. [ saw    fox <sub>i</sub> ] [ (it <sub>i</sub> ) came ] | NP-complement      |
| b. [ saw [ fox                      come ] ]               | clausal-complement |

Meaning alone doesn't preclude RtO/ECM (Lohninger et al., 2022)

# Perception (and similar) verbs:

(15) k'-əłčku-in=(n)in      tsxal-astas      k-k'oł-knen  
 PRT-see-TRNS.PRT=3CL fox-AUGM      PRT-come-PRT

'He saw a fox coming.' [AS (28)]

- a. [ saw   fox<sub>i</sub> ] [ (it<sub>i</sub>) came ]      NP-complement  
 b. [ saw [ fox                      come ] ]      clausal-complement

- All perception verb complements post-verbal, regardless of IS
- (All clausal complements are post-verbal)
- 3/5 VO<sub>new</sub> in Text 1 (15/31 in aggregate) are perception complements

## Perception (and similar) verbs:

- (16) k'-joβa-ʔa-ʔn-(n)in                      qsa-ʔn    k'oʈ-kil-at  
 PRT-encounter-TR.PRT-**PL**-3CL    goose-PL come-NOM-PL  
 'He encountered geese coming.' [AS (76)]
- (17) t'-əʈčku-at-aʈ-čen                      k'e-ze       enu ʈ-qzu-in  
 1SG-see-GO-FUT-3SG.OBJ who-PTCL DEM BE-ASP-3SG  
 'I'll go see who was there.' [TN (101)]
- (18) da-vot muza-ʔn nt'-utu-z-in                      [ βitβit txuŋe-s.       ]  
 INTRJ 1PL-PL 1PL-unable-PRES-3.OBJ seal drag.out-INF  
 'Well, see, we can't drag the seal out.' [KL (18)]

# Restructuring, Order, Scope (Bobaljik & Wurmbrand, 2005)

LDA is (descriptively) optional

- (19) a. na əntxa-βum=nin [ kma jeβna-s. ]  
 3SG forget.TR-1.OBJ=3CL 1SG meet-INF  
 ‘He forgot to meet me.’ [S6:8]
- b. na netxa-in [ kma jeβna-s. ]  
 3SG forget.INTR-3SG 1SG meet-INF  
 ‘He forgot to meet me.’ [S6:9]

# Restructuring, Order, Scope (Bobaljik & Wurmbrand, 2005)

But LDA  $\rightarrow$  object scope over matrix verb:

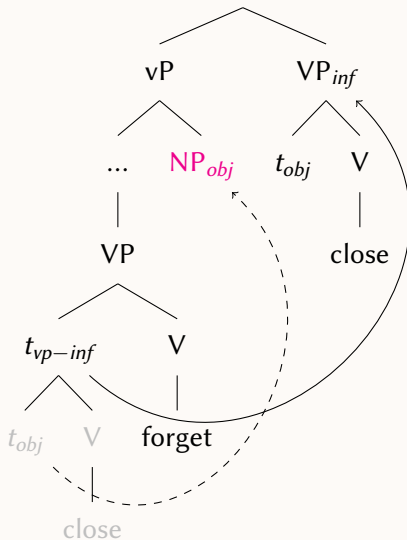
- (20) t'-əntxa-čē-ʔn [ miʔ okno-ʔn sop-es. ]  
 1SG-forget.TR-3.OBJ-PL all window-PL close-INF  
 'I forgot to close all the windows.' [S6:6-7]

$\forall >$  forget no window closed

NOT: forget  $> \forall$  some, not all windows closed



# Restructuring, Order, Scope (Bobaljik & Wurmbrand, 2005)



- Object extraposition precedes (remnant) clausal extraposition
- Same derivation with AUX, possibly more complex under FOFC/LCA

# N-construction: passive/impersonal

- (21) a. **Mit-enk** n-qzu-z-um  
 Miti-LOC N-wait-PRES-1s.OBJ  
 ‘Miti (is) waiting for me.’ [KL (17)']
- b. **tsxal-enk** mił i? n-γil-čen  
 fox-LOC all water N-drink-3sg.OBJ  
 ‘All the water was drunk by the fox.’ [AS (47)']

S: oblique (LOC/INSTR), fixed prefix *n-* [=3PL]

O: unmarked, triggers object agreement

Source of Ergativity and “Inverse” in Chuktokan? (Bobaljik, 2019)

# Passive/Impersonal

(22) a. **kma** n-oms-qzu-βum

1SG N-leave-ASP-3>1SG

‘I was left behind.’ [AS (46)]

b. sinanɛβt-enk **kma** n-txunt-qzu-βum anqle

Sinangewt-LOC 1SG N-raise-ASP-1SG.OBJ winter

‘I was raised by Sinangewt in the winter.’ [AS (85)]

n=7 (Text1), n≥26 (aggregate)

- $O_{old}$  preverbal
- unlike post-verbal  $O_{old}$ , passive O **is topic**
- Agensausblendung (Agent-backgrounding) (Georg & Volodin, 1999, 197)

# Passive/Impersonal

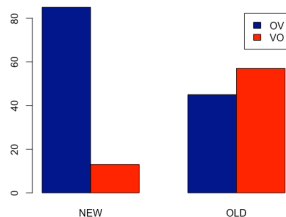
- (23) a    qunʲitʲin kʲɪŋle k-piki-knen ɲeja-ʔn-k  
 and once    night PRT-go-PRT mountain-PL-LOC  
 i    bolʲše na qaʔm k'e-nk    ətʲcku-q k'-it-ʔin.  
 and more 3SG NEG    who-LOC see-NEG PRT-AUX-PRT

‘And one night he went into the mountains and was never seen by anyone again.’ (TL (126))

# Revised Tables (excl. perception, passive)

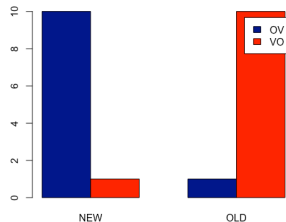
**Table 6:** Aggregated OV/VO  $\times$  old/new  
( $\chi^2=39.9008$ ,  $p<.00001$ )

|           | OV  | VO | Total |
|-----------|-----|----|-------|
| $O_{new}$ | 91  | 16 | 107   |
| $O_{old}$ | 44  | 55 | 99    |
| Totals    | 135 | 71 | 206   |



**Table 7:** Text 1 (final) (Fisher's Exact  
 $p=0.001905$ )

|           | OV | VO | Total |
|-----------|----|----|-------|
| $O_{new}$ | 10 | 2  | 12    |
| $O_{old}$ | 1  | 9  | 10    |
| Totals    | 11 | 11 | 22    |



# Narrative Inversion

VO<sub>new</sub> in Text 1:

- (24) a. k-zun<sup>ɟ</sup>-qzu-kne-ʔn **qsə-ʔn**  
 PRT-live-ASP-PRT-PL goose-PL  
 ‘There lived some geese.’ [AS (1)]
- b. **qsə-ʔn** k'-ənsxt-ʔeʔn **txi-ʔn p'e-ʔn**  
 goose-PL PRT-give.birth-TRANS.PRT.PL 3PL-PL child-PL  
 ‘The geese gave birth to children.’ [AS (2)]

| INTRANSITIVE | V   | SV  | VS | Total |
|--------------|-----|-----|----|-------|
|              | 304 | 236 | 36 | 576   |

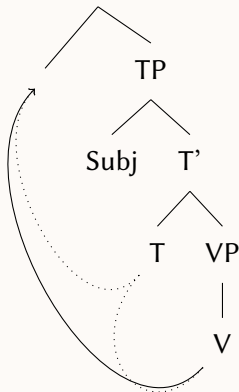
# Narrative Inversion

(Once upon a time, Жил был)

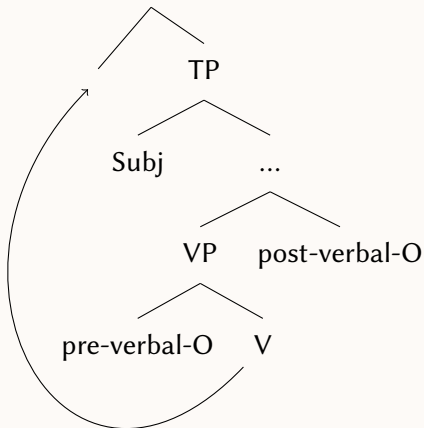
- (25) it'e k-zun<sup>j</sup>†-qu-knen **li** **staroj** **tnaqol**.  
 when PRT-live-ASP-PRT very old old.man  
 'Once there lived a very old man.' [TN (2)]
- (26) it-qat k-zun<sup>j</sup>†-qu-kne-ʔn **Kusx†nequ i** **Miti**,  
 when-already PRT-live-ASP-PRT-PL Kutkh and Miti  
 'Once there lived Kutkh and Miti,' [KL (1)]
- (27) it-qata zin-k k-zun<sup>j</sup>†-qzu-kne-ʔn **č'amza-ʔl**.  
 when-already woods-LOC PRT-live-ASP-PRT-PL person-PL  
 'Once in the woods there lived some people.' [TL ]

# Narrative Inversion

Bailyn (2012, 337)  
(Russian)



(Itelmen)





VO<sub>new</sub> in Text 1

- (60) sinanɛβit sisi-ʔn-č nβen k-sk-aʔn  
 Sinangewt wing-PL-DIM LOC PRT-make-PRT.PL  
 ‘Sinangewt made little wings then.’
- (61) k-ʔən-tʃi-ʔin-(n)i’n qsas-čχ-ank i k-t’ə-nin-(n)in  
 PRT-CAUS-wear-TR.PRT-3CL.PL goose-DIM-DAT and PRT-take-3>3SG-3CL  
 əz-ank  
 outside-DAT  
 ‘She put the wings on him and took him outside.’
- (62) k-χene-knen:  
 PRT-say-PRT  
 ‘She said:’
- (63) “q-taβoŋ-xe’n tinu’n sisi-ʔn-č”  
 2.IRR-try-2>3PL DEM.PL wing-PL-DIM  
 “Try these wings.”

# Competing Constraints: No +new features

- Basic order: OV
- New information: pre-verbal

|           | OV  | VO | Total |
|-----------|-----|----|-------|
| $O_{new}$ | 91  | 16 | 107   |
| $O_{old}$ | 44  | 55 | 99    |
| Totals    | 135 | 71 | 206   |

For  $O_{new}$ : convergence

For  $O_{old}$ : conflicting constraints:

OV > VO

optionality

cf. Bobaljik & Wurmbrand (2012)

(38) a. Who's in charge of nominating the foreign minister?- It is expected that...

- (28) vs. What's happening at the press conference? It's expected that ...

◀ ◻ ▶ ◀ ◻ ▶ ◀ ≡ ▶ ◀ ≡ ▶ ≡ ≡ ▶ ↺ 🔍 ↻

# Refined results:

- syntax of perception complements - no movement?\*
- topic  $\neq$  given
- $O_{new}V$  (robust!)
- backgrounded O tends to be postverbal
- OV + (optional) extraposition

\*pace Bobaljik & Wurmbrand 2005

# A “Noisy Channel” Alternative?

Gibson et al. (2013):

- for  $V_{transitive}$ , if one NP is missing, and if no case marking, what is the role of the NP?
  - SOV base: NP V - ambiguous
  - SVO base: NP V - subject  
V NP - object

**claim** In SOV languages, VO order gives redundant coding of O role for **animate NP**

(NB: Gibson et al. (2013) consider no language data, only gesture tasks)  
See Kocab et al. (2018) for additional critical remarks.

# A Noisy Channel?

Itelmen:

- No case marking S/O
- OV~VO
- usually only one overt NP:

|         |     |                |
|---------|-----|----------------|
| V       | 58  |                |
| V,NP    | 190 | (S: 20, O:170) |
| V,NP,NP | 69  |                |
| <hr/>   |     |                |
| Total   | 317 | (raw)          |

# A Noisy Channel?

No: Small effect of animacy, but larger effect of old/new.

- Holding other predictor variables constant:
  - odds ratio  $VO_{anim} : VO_{inan} = 2.1$  (95% CI [1.0, 4.3]).
  - odds ratio  $VO_{old} : VO_{new} = 6.1$  (95% CI [3.1, 12.9]).
- binary logistic regression model (glmer in R)  
 $glmer(ORDER \sim INFSTR + ANIMACY + (1|TEXT))$

## A different animacy factor?

Aside: Small effect of animacy independent of IS, but  $O_{inan}V$  or  $VO_{anim}$ ?

(29) esx-ank-əŋ      li      plex-a?n txu?-i?n<sub>new</sub> q-la-qzu-čx-e?n  
 father-DAT-DAT very big-PL      greeting-PL IMP-tell-ASP-II-PL  
 ‘Give (tell) your father big greetings!’ [TN (110)]

(30) muza-?n mił esx-a?n-k-əŋ      txu?-i?n<sub>old</sub> nt’-la-ał-xŋ-e?n  
 1PL-PL all father-PL-DT-DT greeting-PL 1PL-tell-FUT-II-PL  
 ‘We will all give (tell) our fathers greetings!’ [TN (112)]

Non-referential O?

When these (n=22) are excluded, effect of animacy dips below significance: (p=.0981, OR 1.9 (95% CI [0.9, 4.1])).



# Noisy Channel?

- Main driver of  $OV \sim VO$  is IS, not animacy
- small effect of animacy, many potential sources
- single NP with transitive verb 8.5:1 NP = object
- since  $S \Leftrightarrow$  topic, IS alone normally enough to resolve GF
- Noisy channel effect not a contender for explanation of alternation

# Conclusions: OV~VO in Itelmen

- Itelmen is an OV language (basic order)
- OV/VO reflects Information Structure
  - $O_{new}$  is almost always pre-verbal
  - $O_{old}$  may (need not) extrapose
- perception complements are clausal, despite agreement
- preverbal focus is low, extraposed O is high (not Cartography)
- potential for correlation V-final/-initial with prosody  
(Jackendoff, 1972; Schmerling, 1976; Gussenhoven, 1983; Selkirk, 1984; Arregi, 2016; Szendrői, 2017; Borise et al., 2024, u.v.a.)

“There is no grammatical marking of newness: The apparent prosodic effects of newness are the result of default prosody.” (Kratzer & Selkirk, 2020)

# Common end to traditional narratives (Text 1)

- (31) ti'n-nu    t-pent~~+~~fi-s-čen  
DEM-PRTC 1SG-finish-PRES-1>3SG  
'Here I have finished [the story].' (AS(95))

## *aside:* Word Order Freezing?

Why does Itelmen use more R-movement than Turkish?

Speculation:

(Almost) no scrambling across the subject.

Only 1 (non-wh, non N-construction) example of OSV in texts:

(32) tnaqol tχi-ʔn k-tzəl-knen  
old.man 3PL-PL PRT-catch.up-PRT-PL

‘They caught up to the old man.’ [TN (63)]

(O here is topic of story, but not of sentence)

caveat: short L-scrambling not investigated

*aside: Word Order Freezing?*

- (33) a. otc-a ljubiti syn OSV  
father-ACC loves son.NOM  
'The son loves the father.'
- b. mat' ljubiti doč' SVO #OVS  
mother.NM=AC loves daughter.NM=AC  
'The mother loves the daughter.'
- (Jakobson, 1936[1971] vs. King, 1995)

Where case marking doesn't distinguish actants, S>O preferred

- (34) Doch die Sowjetunion konnte M. Gorbatschow nicht retten.  
yet the Soviet.Union could M. G. not save.  
(*Der Standard* 31.08.22, h/t Susi Wurmbrand)

Abramovitz, Rafael (2019) Word Order and Negation in Koryak, handout of a paper presented at MIT.

Arregi, Karlos (2016) Focus projection theories. In *The Oxford Handbook of Information Structure*, Caroline Féry & Shinichiro Ishihara, eds., Oxford: Oxford University Press, 185–202.

Bailyn, John Frederick (2012) *The Syntax of Russian*. Cambridge: Cambridge University Press.

Biberauer, Theresa, Anders Holmberg, & Ian Roberts (2014) A syntactic universal and its consequences. *Linguistic Inquiry* 45(2): 169–225.

Bobaljik, Jonathan David (2019) The Chukotkan “inverse” from an Itelmen perspective. In *Лингвистика и другие важные вещи: Памяти Александра Павловича Володи́на [Linguistics and other important things]*, E. V. Golovko, A. M. Pevnov, M. Yu. Pupynina, A. A. Syuryun, & A. Yu. Urmanchieva, eds., Sankt-Peterburg: Institute of Linguistics, Russian Academy of Sciences, 415–435.

Bobaljik, Jonathan David & Susi Wurmbrand (2005) The domain of agreement. *Natural Language and Linguistic Theory* 23: 809–865.

Bobaljik, Jonathan David & Susi Wurmbrand (2012) Word Order and Scope: Transparent interfaces and the 3/4 signature. *Linguistic Inquiry* 43(3): 371–421.

Borise, Lena, Erika Asztalos, Katalin Gugá, Nikolett Mus, Andreas Schmidt, & Balázs Surányi (2024) Towards more flexible verb-finality via a reanalysis of

prosodic structure. Talk given at Department of Linguistics, University of Alberta.

Butt, Miriam & Tracy Holloway King (1997) Null elements in discourse structure., ms.

Comrie, Bernard (1980) Morphology and word order reconstruction: Problems and prospects. In *Historical morphology*, Jacek Fisiak, ed., The Hague: Mouton, 83–96.

Dyakonova, Maria (2009) *A phase-based approach to Russian free word order*. Ph.D. thesis, University of Amsterdam.

Gambhir, Vijay (1981) *Syntactic restrictions and discourse functions of word order in Standard Hindi*. Ph.D. thesis, University of Pennsylvania, Philadelphia.

Georg, Stefan & Aleksandr P. Volodin (1999) *Die itelmenische Sprache*. Wiesbaden: Harrassowitz Verlag.

Gibson, Edward, Steven T. Piantadosi, Kimberly Brink, Leon Bergen, Eunice Lim, & Rebeccas Saxe (2013) A noisy-channel account of crosslinguistic word order variation. *Psychological Science* **24**(7): 1079–1088.

Gussenhoven, Carlos (1983) Focus, Mode and the Nucleus. *Journal of Linguistics* **19**(2): 377–417.

Jackendoff, Ray (1972) *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.

Jakobson, Roman (1936[1971]) Beitrag zur allgemeinen Kasuslehre.

Gesamtbedeutungen der russischen Kasus. In *Selected Writings*, vol. 2, Roman Jakobson, ed., The Hague: Mouton, 23–71.

King, Tracy Holloway (1995) *Configuring Topic and Focus in Russian*. Stanford: CSLI.

Kocab, Annemarie, Hannah Lam, & Jesse Snedeker (2018) When Cars Hit Trucks and Girls Hug Boys: The Effect of Animacy on Word Order in Gestural Language Creation. *Cognitive Science* **42**: 918–938.

Kornfilt, Jaklin (2005) Asymmetries between pre-verbal and post-verbal scrambling in Turkish. In *The free word order phenomenon : its syntactic sources and diversity*, Joachim Sabel & Mamoru Saito, eds., Berlin: Mouton de Gruyter, 163–181.

Kratzer, Angelika & Elisabeth Selkirk (2020) Deconstructing information structure. *Glossa* **5**(113): 1–53.

Kural, Murat (1997) Postverbal constituents in Turkish and the Linear Correspondence Axiom. *Linguistic Inquiry* **28**: 498–519.

Lohninger, Magdalena, Iva Kovač, & Susanne Wurmbrand (2022) From Prolepsis to Hyperraising. *Philosophies* **7**(32).

Ono, Chikako (2021) *Itelmen-go bunpo: Dousi keitairon wo chuusin ni. [Itelmen Grammar: focusing on verb morphology]*. Sapporo, Japan: Hokkai-Gakuen University Press.



- Schmerling, Susan F. (1976) *Aspects of English Sentence Stress*. Austin: University of Texas Press.
- Selkirk, Elisabeth (1984) *Phonology and Syntax*. Cambridge, MA: MIT Press.
- Şener, Serkan (2010) *(Non-)Peripheral Matters in Turkish Syntax*. Ph.D. thesis, University of Connecticut, Storrs, CT.
- Szendrői, Kriszta (2017) The syntax of information structure and the PF interface. *Glossa* 2(32): 1–28.
- Titov, Elena (2012) *Information Structure of Argument Order Alternations*. Phd dissertation, University College London, London.
- Vallduví, Enric (1992) *The Information Component*. New York: Garland Press.
- Volodin, Aleksander P. (1976) *Ительменский язык*. Moscow: Nauka.