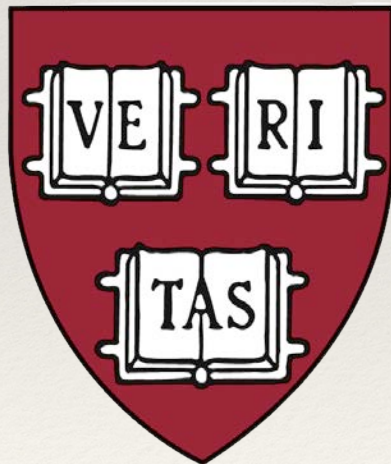

Universals and Variation in Linguistic Morphology: Some Kamchatkan Evidence

Jonathan David Bobaljik
Harvard University
Quirk Lecture QMUL
11 May 2026



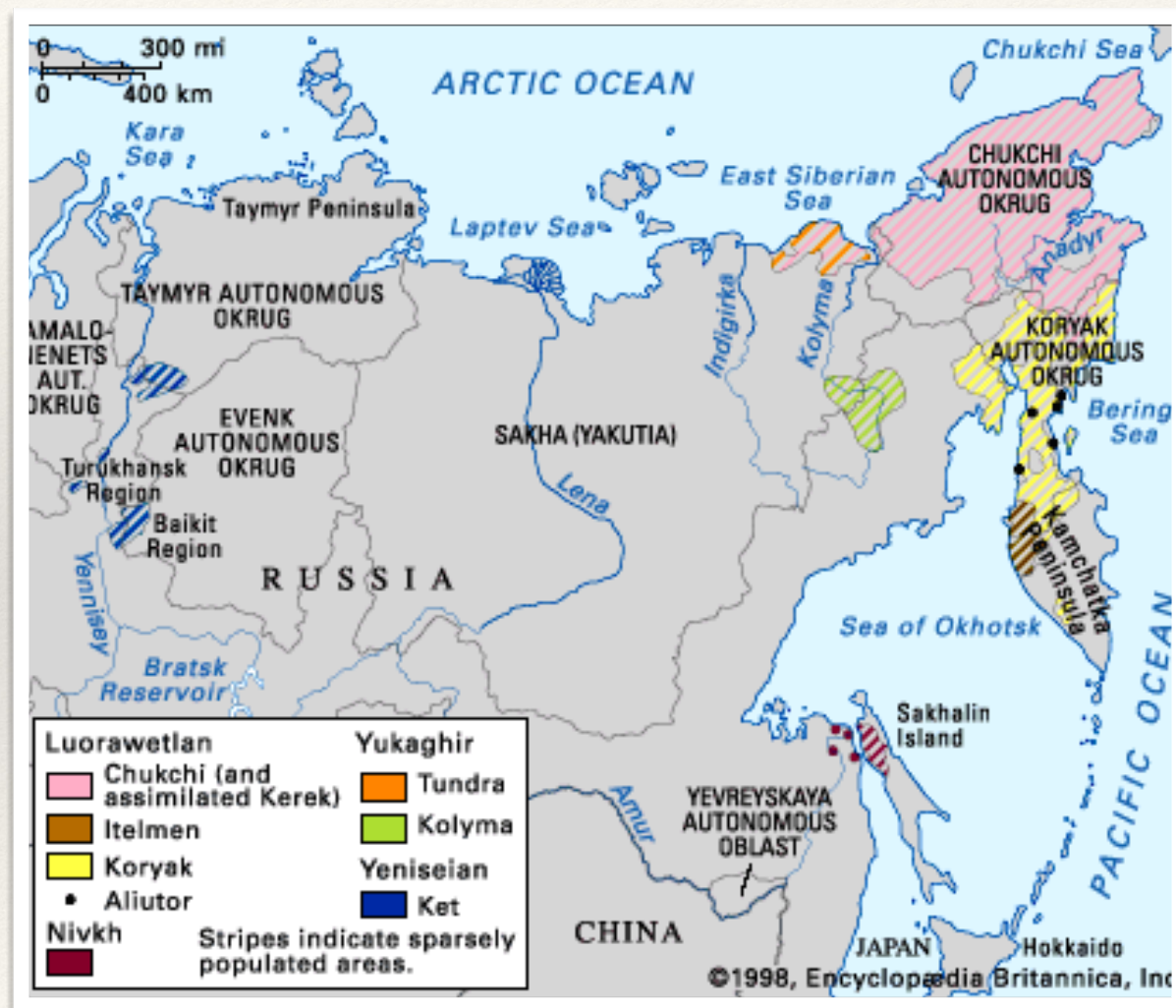
Themes for today

- ❖ Just how much do languages differ from one another?
- ❖ What explains limits on variation?
- ❖ What can we learn from under-studied / under-represented languages?
- ❖ Case study from Itelmen (Kamchatka, Russia)



Itelmen background

- ❖ Chukotko-Kamchatkan (“Paleo-Siberian”)
- ❖ L1 speakers:
 - ❖ 18thC: thousands
 - ❖ 1990s: < 100
 - ❖ 2025: 1 + penumbra
- ❖ shift to Russian (by 1950s)



Linguistic Universals - Morphology

- ❖ If a language has a dual category, then it also has a plural category.

(Greenberg 1966, U34,
Corbett 2000, Harbour 2014)

- ❖ Implicational universal (if $\rightarrow$ then)
- ❖ Universal of categories/inventories

	1	2	>2
❖	kuluk	— kuluk	— kuluk (Balinese)
❖	dog	— dogs	— dogs (English)
❖	qimmiq	— qimmik	— qimmiit (Inuktitut)
❖	* dog	— dogs-2	— dog (*unattested)

Linguistic Universals – Morphology

Czech: basic — CMPR — SPRL

- ❖ ‘young’: mlad-ý — mlad-ší — nej-mlad-ší
- ❖ ‘soft’: bled-ý — bled-ší — nej-bled-ší
- ❖ ‘weak’: slab-ý — slab-ší — nej-slab-ší
- ❖ ‘good’: dobr-ý — lep-ší —
- ❖ ‘bad’: špatn-ý — hor-ší —

Linguistic Universals - Morphology

Czech: basic — CMPR — SPRL

- ❖ 'young': mlad-ý — mlad-ší — nej-mlad-ší
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- ❖ 'weak': slab-ý — slab-ší — nej-slab-ší
- ❖ 'good': dobr-ý — lep-ší — nej-lep-ší *nej-dobr-ší
- ❖ 'bad': špatn-ý — hor-ší — nej-hor-ší *nej-špatn(e)-ší

In Czech, the superlative is built from the comparative.

Add [nej- [COMPARATIVE]]

Linguistic Universals - *ABA

- ❖ god — bed-re — bed-st (Danish)
- ❖ dobr-ý — lep-ší — nej-lep-ší (Czech)
- ❖ hea — pare-m — par-in (Estonian)
- ❖ asko — gehi-ago — gehi-en (Basque)
- ❖ osda — dajehla — wi-dajehl-ãʔi
(Cherokee)

- ❖ If the comparative degree of an adjective is suppletive, then the superlative is also suppletive (i.e., with respect to the positive) = *ABA.

(Bobaljik 2012, cf. Ultan 1972)



Linguistic Universals - *ABA

- ❖ big — bigger — biggest (AAA)
- ❖ good — better — best (ABB)
- ❖ bonus — melior — optimus (ABC)
- ❖ * good — better — goodest (*ABA)
- ❖ * good — gooder — best (*AAB)
- ❖ If the comparative degree of an adjective is suppletive, then the superlative is also suppletive (i.e., with respect to the positive) = *ABA.
(Bobaljik 2012, cf. Ultan 1972)
- ❖ Implicational universal (if → then)
- ❖ Universal of **contextual allomorphy** (alternations in form)

Contextual Allomorphy

Czech:

- ❖ 'young': mlad-ý — mlad-ší — nej-mlad-ší
- ❖ 'good': dobr-ý — lep-ší — nej-lep-ší

- ❖ Superlative = more than all others
- ❖ Contains the comparative.

Exponents:

GOOD → /lep-/ / __ CMPR

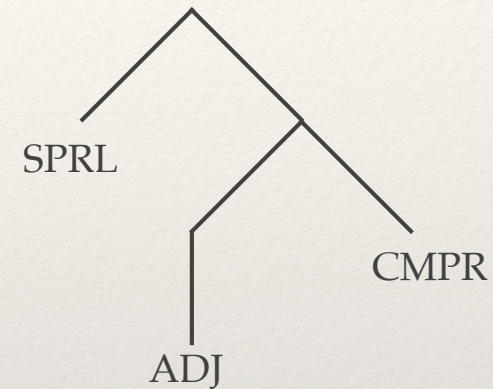
GOOD → /dobr-/

- ❖ Competition:
- ❖ Specific (narrow) rule takes precedence (Pāṇini, Saussure, etc)

Contextual Allomorphy

Czech:

- ❖ 'young': mlad-ý — mlad-ší — nej-mlad-ší
- ❖ 'good': dobr-ý — lep-ší — nej-lep-ší



Exponents:

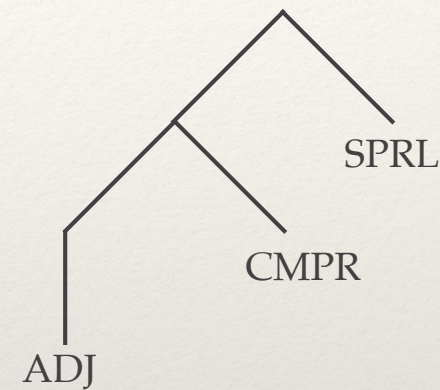
GOOD → /lep-/ / __ CMPR

GOOD → /dobr-/

- ❖ Competition:
- ❖ Specific (narrow) rule takes precedence (Pāṇini, Saussure, etc)

Linguistic Universals - *ABA

- ❖ god — bed-re — bed-st (Danish)
- ❖ dobr-ý — lep-ší — nej-lep-ší (Czech)
- ❖ hea — pare-m — par-in (Estonian)
- ❖ asko — gehi-ago — gehi-en (Basque)
- ❖ bonus — melior — optimus (Latin)



Hidden Structure

GOOD → /bed-/ / __ CMPR

GOOD → /god-/

Superlatives are always “built from” comparatives, even when some pieces are unpronounced.

Clusivity and Universals of Person

PLURAL (x) = group that includes x
(associative plural)

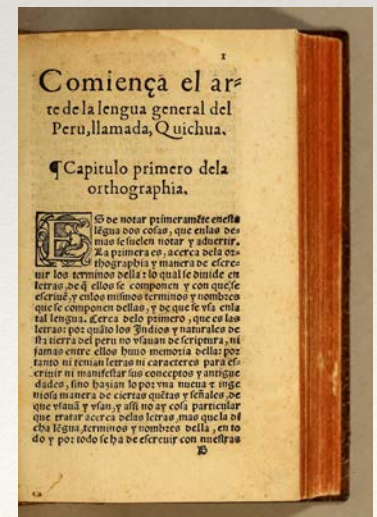
- ❖ [1] = AUTHOR (SPEAKER)
- ❖ [2] = ADDRESSEE (HEARER)
- ❖ [3] = OTHER
- ❖ [1PL] = INCLUDES AUTHOR
- ❖ [2PL] = INCLUDES ADDRESSEE
- ❖ [3PL] = OTHERS

Forchheimer 1953, Cysouw 2003, Simon 2005, Bobaljik 2008, Harbour 2016

Clusivity and Universals of Person

- ❖ [1PL] = includes AUTHOR
 - ❖ [1INCL] = includes AUTHOR, but not ADDRESSEE
 - ❖ [1EXCL] = includes AUTHOR, and ADDRESSEE
- ❖ [2PL] = includes ADDRESSEE, but not AUTHOR
- ❖ [2PL] = includes ADDRESSEE, but not AUTHOR
- ❖ [3] = others
- ❖ [3PL] = others

Universal: These are the only two systems of person
(esp. Zwicky 1977, Filimonova ed. 2005, Harbour 2016)
(Domingo de Santo Tomás 1560, see Cysouw 2003)



Clusivity and Universals of Person

Referents	a. Clusivity Evenki	b. General we English	c. *syou *n/a*
AUTH (not ADDR)	bu	we	*swe
AUTH and ADDR	mit	we	*syou
ADDR (not AUTH)	su	you	*syou
neither	nungartyn	they	they

Parameter — languages vary = different categories
English *we* means [1PL]

Competing proposals:

Syncretism — universal categories, some
distinctions neutralized in some languages
English *we* is ambiguous

Inclusive Imperatives (Hortatives)

- ❖ Let's go!
 - ❖ Allons-y! (French)
 - ❖ Gemma [gehen wir] (German)
- double-marking (composed inclusive):
- go -1PL -2PL
- ❖ pojɔ-em(-te) (Russian)
 - ❖ bar-ɪay(-ɪŋ) (Sakha, Turkic)^a
 - ❖ pot-o-m-(-i) (Udmurt, Uralic)^b
 - ❖ mn-il-sx (Itelmen)
- ❖ Imperative: command / invitation for addressee [2PSN] to do something! (Kaufmann 2012)
 - ❖ Inclusive imperative: command / invitation for addressee [2PSN] to do something together with author [1PSN]
 - ❖ Default interpretation of 1PL imperatives in all languages (Goussev 2005, Dobrushina & Goussev 2005)

^a Nevskaya 2005, Dobrushina & Goussev 2005, ^b Masliukov 2024

Composed Inclusive Imperatives

go -1^{PL} -2^{PL}

- ❖ poj-d-em(-te) (Russian)
- ❖ bar-1ay(-1ŋ) (Sakha, Turkic)
- ❖ pot-o-m-(-i) (Udmurt, Uralic)
- ❖ mn-il-sx (Itelmen)

Two ‘types’: stacking type
Itelmen type

- ❖ Main proposal (broad):
- ❖ Distribution of Composed Inclusives easily explained (only) if these languages *lack* a person category of [1+2] inclusive.
- ❖ some quirks of the Itelmen forms — some agreement is contextual allomorphy

Itelmen verbal morphology (nutshell)

PREFIX - STEM - SUFFIX

Subject }
Mood }

{ Subject (intrans)
{ Object (trans)

1. t'- əłčku -in
1SG- see -2SG
'I saw you.'

2. t'- ił -k(ičen)
1SG- go -1
'I went.'

3. n- əłčku -in
3PL- see -2SG
'They saw you.'

4. n- əłčku -βum
3PL- see -1SG
'They saw me.'

Itelmen imperatives

PREFIX - STEM - SUFFIX

Subject }
Mood }

{ Subject (intrans)
{ Object (trans)

5. **m(ə)n-** ił **-k(ičen)**

1PL.IMP- go -1

'Let's go!'

6. **q-** ił **-sx**

2IMP- go -2PL

'Go! (PL)'

7. **m(ə)n-** ił **-sx**

1PL.IMP- go -2PL

'Let's go!'

2. **t'-** ił **-k(ičen)**

1SG- go -1

'I went.'

composed inclusive

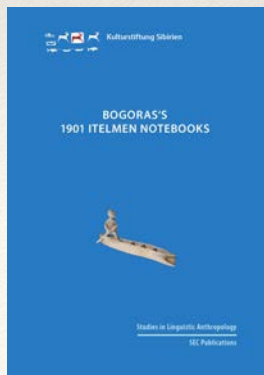
attested in texts

not in previous grammars

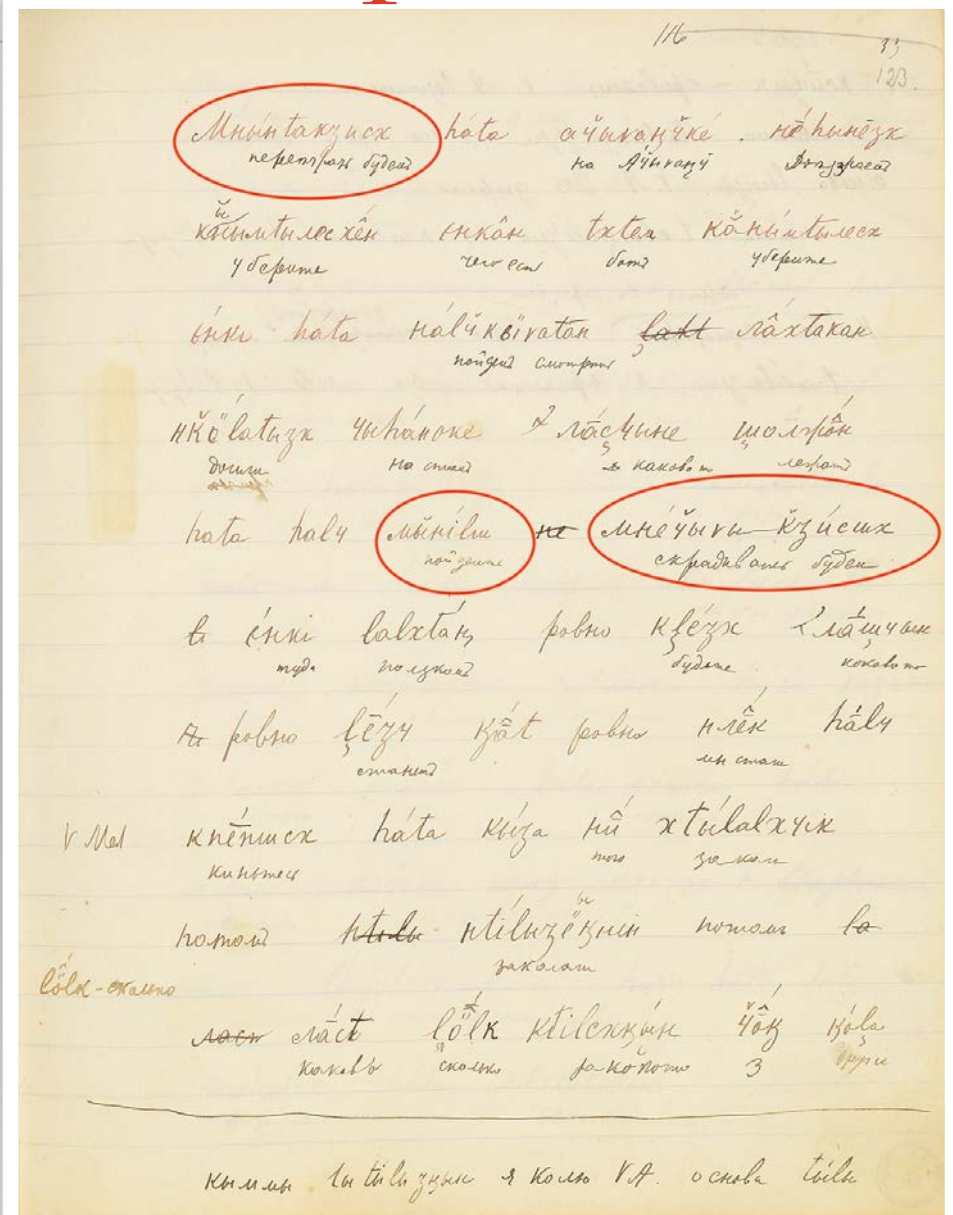
(passing mention Ono 2021)

Composed inclusive imperatives

- ❖ **mn-ənta-qzu-sx**
ənta- 'go across'
- ❖ **mn-il-s[x]**
il- 'go'
- ❖ **mn-eč'eβi-qzu-sx**
eč'eβi- 'hide'



- ❖ Bogoras (1901);
Bobaljik, Pupynina &
Syuryun (2023)



Only Imperatives

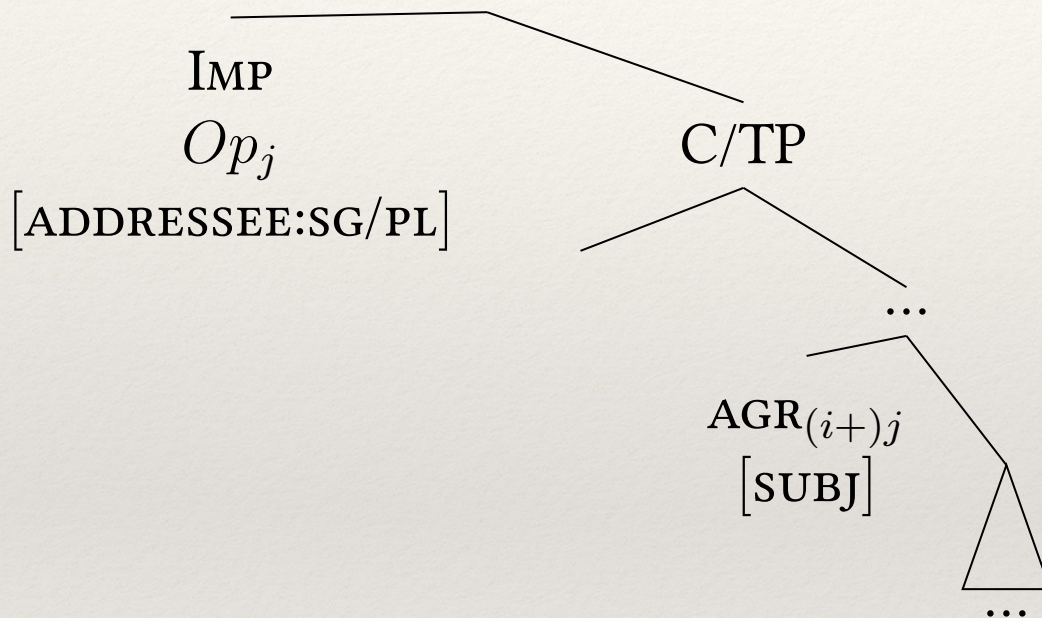
- ❖ qat n-niŋ-kičen ... xalč mn-ənta-qzu-sx
 already 1PL-load-1 ... PRTCL 1PL.I-cross-ASP-2PL
 ‘We’ve loaded up. Let’s go across!’
 * n-niŋ-sx
 1PL- ... -2PL
- ❖ desjat n-ləm-čeʔn, xalč čβanoke mn-əntxla-qzu-sx-ŋiʔn
 10. 1PL-kill-1>3PL, PRTCL to.cam 1PL-take-2PL-2>3PL
 ‘We killed 10. Let’s take them to camp.’
 * n-ləm-sx-ŋiʔn
 1PL ... 2PL-2>3



Bogoras notebook (1901):
Seal hunting narrative

Okhotsk coast, Achvanch island in
background at left. © E. Kasten 1994

Only Imperatives



- ❖ Imperative Operator (cf. Zanuttini 2008)
- ❖ ADDRESSEE must be included in SUBJECT
- ❖ but, ADDRESSEE and SUBJECT are syntactically distinct

Imperative/hortative: addressee must be included
Jussive/hortative: addressee brings about P

Only Imperatives

IMPERATIVE [Subject Verb-Agr ...
(ADDRESSEE)

Russian (and Udmurt): two ways of making imperatives

Khrakovskij and Volodin 1986, also Kasenov ms.

			SUBJ	ADDRESSEE
Analytic		pojd- em	PL	SG
		pojd- em-te	PL	PL (or POLITE)
		go-1PL-(2PL)		
Synthetic	davaj	pojd- em	PL	SG
	davaj- te	pojd- em	PL	PL (or POLITE)
	PRTCL-(2PL)	go-1PL		

Only Imperatives

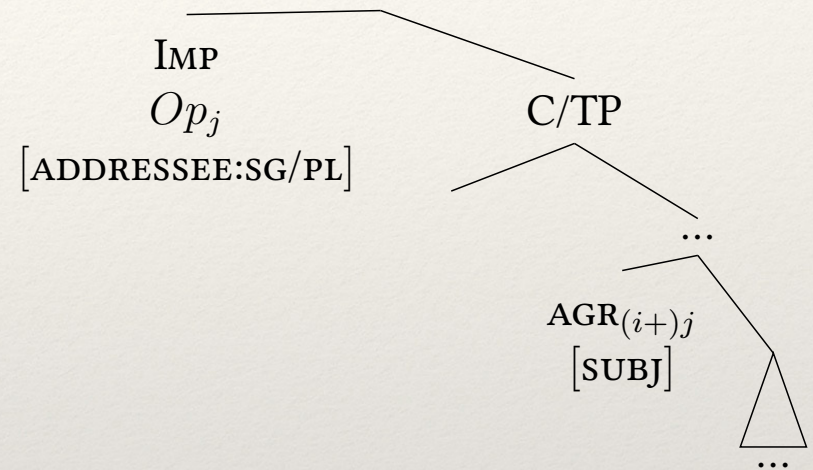
Imperative:

[2(PL)]

❖ [we go-1PL]

❖ [y'all go-2PL]

❖ [you go-2SG]



davaj-(te)

poj-d-em

~~davaj-~~

poj-d-em-te

PRTCL-(2PL)

go-1PL-2PL



Inclusive is composed

1pl and 2pl have different
sources

Speech Act Theory: Performative Hypothesis

Every sentence has a silent representation of the Speech Act type:

(Ross 1970 < Austin ; Wiltschko 21, Miyagawa 22, Krifka 23, Baker 24)

- ❖ Decl: <I tell you that> S
- ❖ Imper: <I order *you* to> S ❖ S = [*Subject* verb ...]
- ❖ Interr: <I ask you if> S

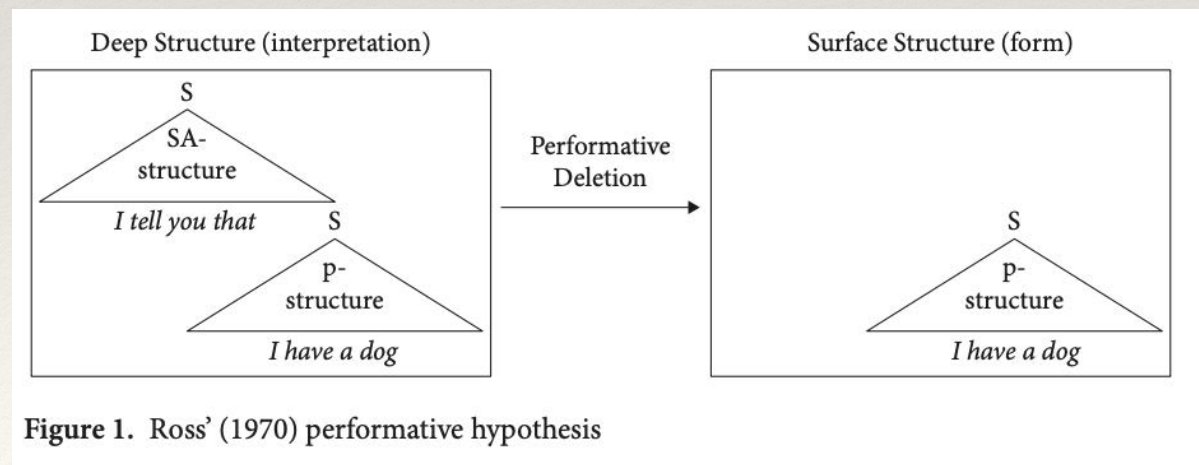


Figure 1. Ross' (1970) performative hypothesis

Only Imperatives

- ❖ qat n-niŋ-kičen ... xalč mn-ənta-qzu-sx
already 1PL-load-1 ... PRTCL 1PL.I-cross-ASP-2PL
'We've loaded up. Let's go across!'

* n-niŋ-sx
1PL- ... -2PL
- ❖ desjat n-ləm-čeʔn, xalč čβanoke mn-əntxla-qzu-sx-ŋiʔn
10. 1PL-kill-1>3PL, PRTCL to.cam 1PL-take-2PL-2>3PL
'We killed 10. Let's take them to camp.'

* n-ləm-sx-ŋiʔn
1PL ... 2PL-2>3

Bogoras notebook (1901): Seal hunting narrative

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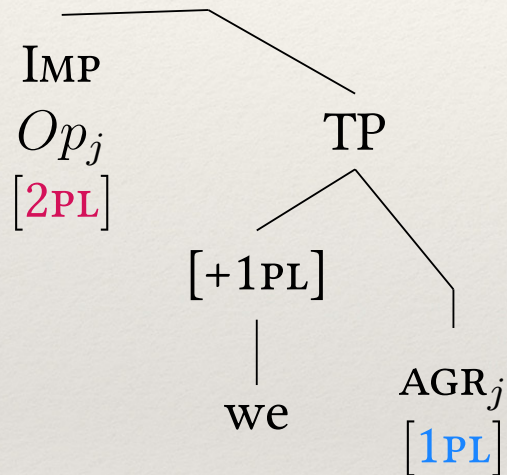
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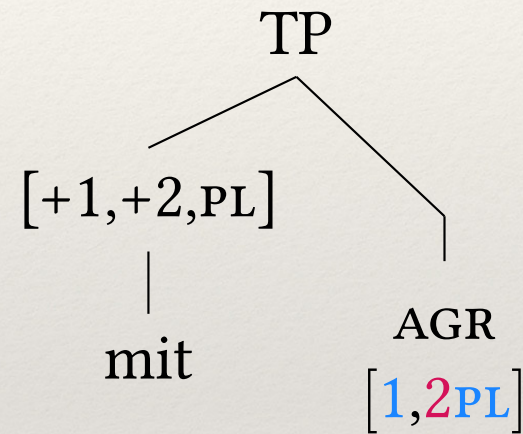
Clusivity, imperatives

Composed Inclusive
Itelmen, Russian, Siberian Turkic



Inclusive only in the presence
of imperative operator

Contrast True Inclusive
Evenki etc.



Imperative operator not
needed for inclusive forms

Interim summary

- ❖ Clusivity as a parameter
- ❖ Argument from an unanticipated source:
composed inclusives across languages restricted to imperative.

- ❖ poj-d-em(-te) (Russian)
- ❖ bar-1ay(-1ŋ) (Sakha, Turkic)
- ❖ pot-o-m-(-i) (Udmurt, Uralic)
- ❖ mn-il-sx (Itelmen)

Two new puzzles

- ❖ Itelmen:
- ❖ Why not stacking?
- ❖ Why 1PL-V-2PL,
not 2PL-V-1PL?

- ❖ poj-d-em(-te) (Russian)
- ❖ bar-1ay(-1ŋ) (Sakha, Turkic)
- ❖ pot-o-m-(-i) (Udmurt, Uralic)
- ❖ mn-ił-sx (Itelmen)

m(ə)n- ił -k(ičen)

1PL.IMP- go -1

'Let's go!'

q- ił -sx

2IMP- go -2PL

'Go! (PL)'

m(ə)n- ił -sx

1PL.IMP- go -2PL

'Let's go!'

Itelmen verbal morphology (nutshell)

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3PL- see -2SG
'They saw you.'

4. n- əłčku -βum
3PL- see -1SG
'They saw me.'

Portmanteaus

PREFIX - STEM - SUFFIX

Subject }
Mood }

{ Subject (intrans)
{ Object (trans)

t'- əłčku -**čen**

1SG- see -1>3SG

'I saw it.'

Ø- əłčku -**sx**

2- see -2PL>3SG

'Y'all saw it.'

Ø- əłčku -**n**

2- see -2SG>3SG

'You saw it.'

n- əłčku -**nen**

3PL- see -3>3SG

'They saw it.'

❖ Quirk of Chukotko-Kamchatkan agreement

❖ If Obj is 3PSN, then suffix is a **portmanteau** SUBJ>OBJ

Portmanteaus

PREFIX - STEM - SUFFIX

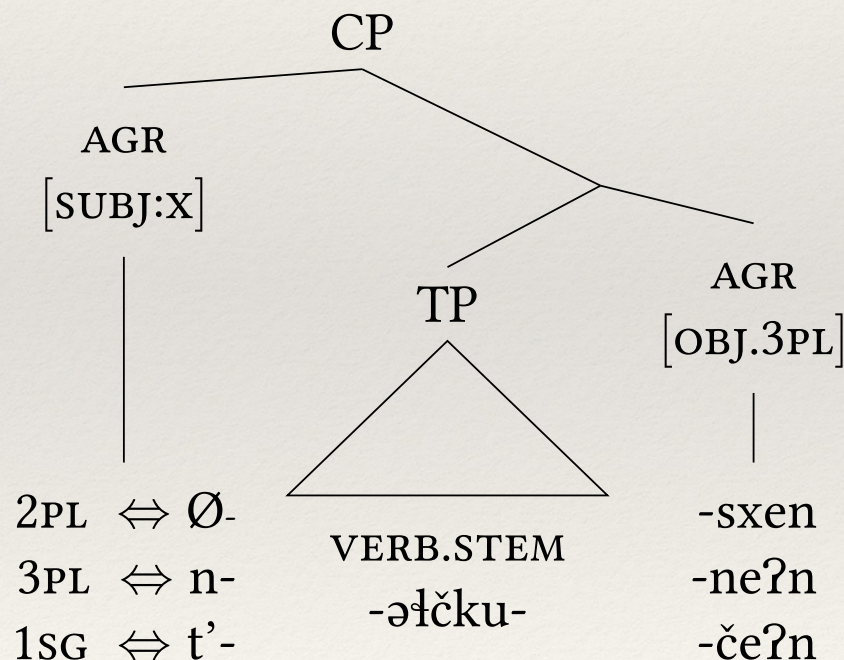
Subject }
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{ Object (trans)

Suffix:

Prefix:

- ❖ primary exponent of subject agreement
- ❖ allomorphy for mood



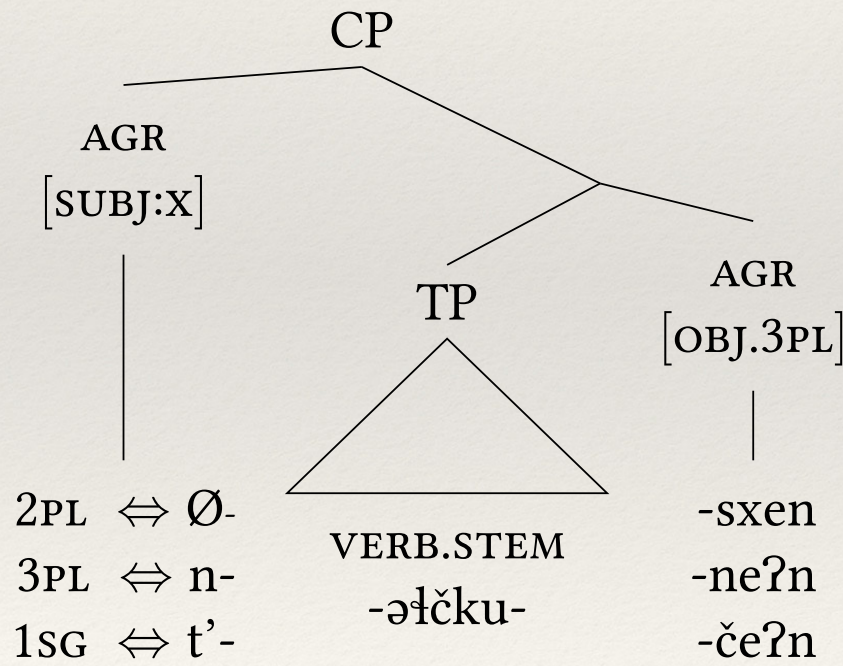
- ❖ primary exponent of object agreement
- ❖ if Obj = 3, or Ø:
- ❖ allomorphy for higher person features

Portmanteaus

PREFIX - STEM - SUFFIX

Subject }
Mood }

{ Subject (intrans)
{ Object (trans)



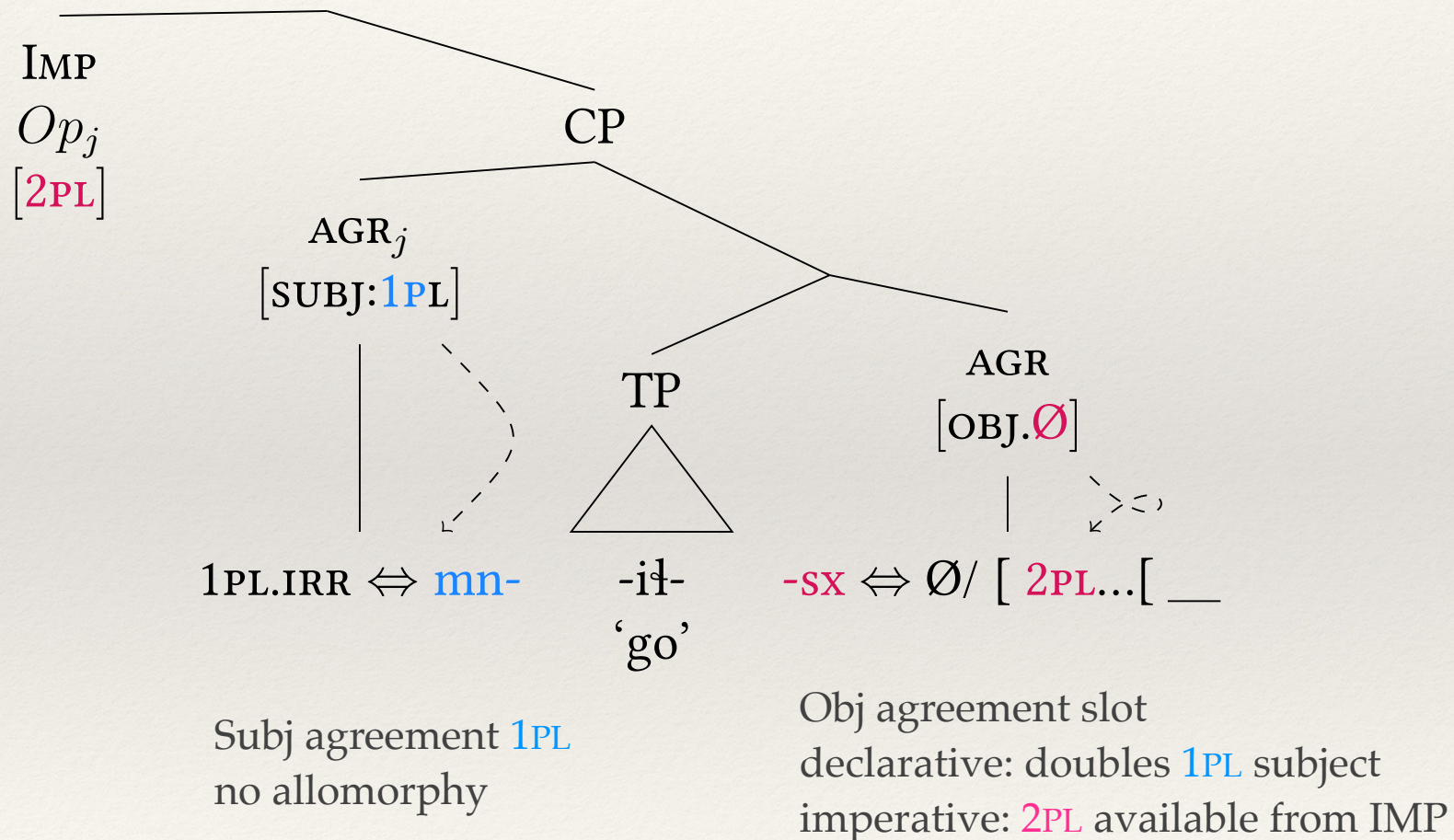
❖ allomorphy for higher person features (partial):

OBJ:3pl ⇔ -sxen / [2PL ... [____

OBJ:3pl ⇔ -neʔn / [3 ... [____

OBJ:3pl ⇔ -čeʔn / [1 ... [____

Putting the pieces together



Only Imperatives

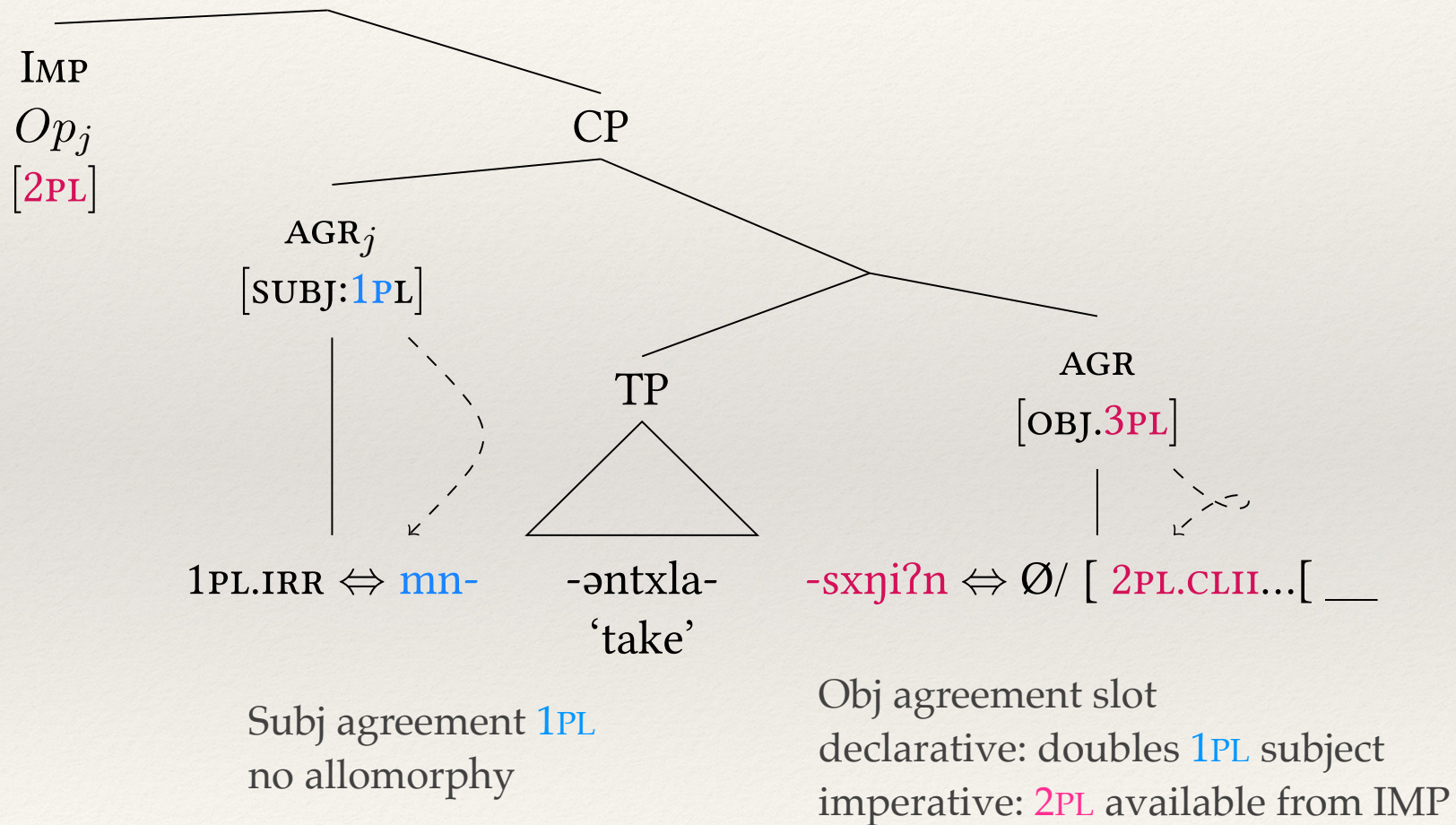
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* n-ləm-sx-ŋiʔn
1PL ... 2PL-2>3

Bogoras notebook (1901): Seal hunting narrative

Putting the pieces together



Itelmen summary

- ❖ The Itelmen pattern is unique
- ❖ But, it is the result of combining the analysis of composed inclusive imperatives ...
- ❖ ... with the independent properties of Itelmen (CK) agreement portmanteaus (and double intransitive marking)
- ❖ Positing that Itelmen has an inclusive [1+2] category of person could describe the facts...
- ❖ But does not explain why the prefix suffix asymmetry, and lack of stacking, play out as they do.
- ❖ (The complex transitive portmanteaus also show this is not just a calque from Russian)

Not just a calque

Stacking [... 1PL-2PL] is unattested:

a. regular

[mn-ił-k]

[mn-ił-kičen]

1PL.IRR-go-1.S

b. composed

[mn-ił]-sx

[mn-ił]-sx

1PL.IRR-go-2PL

c. unattested

*[mn-ił-k]-sx

*[mn-ił-kičen]-sx

1PL.IRR-go-1.S-2PL

Forms would be independently OK:

phon OK:

q-ŋi^{ksx}-č

2.IRR-sleep-2SG

morph OK:

q-ančp-min^ŋ-sx

2.IRR-teach-1SG.O-2PL

Aside: Russian as calque?

- ❖ Russian is the only Slavic language with this form, why?
- ❖ 13th C - loss of distinction: imperative vs. future (Ivanov 1983:357)
1PL: -ěm v. -im; 2PL: -ěte vs. -ite

ВЪЗМѢТЕ	VS.	ВОЗМИТЕ
vozm-ěte		vozm-ite
take-2PL.IMP		take-2PL.FUT

- ❖ 17th C - first attestation of -em-te forms: (Belousov 1982:152)
поспѣшимъте, милая братья, къ своему царю Соломону
pospěš-im-te, milaja bratja, k svoemu tsarju Solomonu
hurry-1PL-2PL, dear brothers, to self's tsar Solomon

❖ (Пов. ц. Дав. XVII, 69)

Aside: Russian as calque?

- | ❖ | 1PL | 2PL | 1PL+2PL |
|---|------|-----|---|
| ❖ | -ëm | -te | -ëm-te [Russian] (from 17th C) |
| ❖ | -yax | -yŋ | -yay-yŋ [Sakha] |
| ❖ | -aly | -yŋ | -aly-ŋ [Turkmen]
= Middle Turkic, 13th C (Erdal 2004: 237) |

Conjecture: Turkic as source for Russian calque

Conclusions

- ❖ Itelmen: unique construction: “half-and-half” inclusive imperatives.
- ❖ Shares key properties with other “composed inclusive imperatives”
- ❖ Differences combine general analysis with independent differences in agreement
- ❖ “Every language in its own terms” — obscures deep commonalities
- ❖ Composed inclusives in imperative only
- ❖ Clusivity is a category difference (not syncretism)
- ❖ But variation is limited — there are (apparent) universals!



Qetf'et!



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