

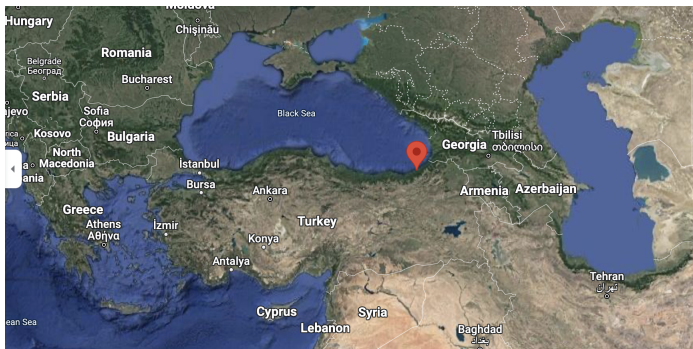
Subject Pseudo-incorporation in Laz

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What's this talk about?

Laz is an endangered South Caucasian language spoken in Turkey.



What's this talk about?

Laz combines typologically rare and/or understudied features:

- ▶ active-ergative case alignment
- ▶ agreement with objects (besides subjects)
- ▶ oblique (dative) subject constructions

Holisky (1991), Lacroix (2009), Öztürk and Pöchtrager (2011), Tuite (2017)

What's this talk about?

This work → Pazar (Atina) dialect of Laz



What's this talk about?

This work → Pazar (Atina) dialect of Laz



- ▶ We show that Pazar Laz allows subject pseudo-incorporation (PI)
- ▶ We study how subject PI interacts with the case system, phi-agreement system, and oblique subjects in the language

Evidence for Subject PI: Case

Case alignment in Laz (Pazar/Atina) is active-ergative in the sense of Woolford (2015), differentiating external vs. internal arguments:

- (1)
- a. laç'i-**k** ts'ari ş-um-s
dog-**ERG** water.NOM drink.IMPF-PRS.3SG
'The dog is drinking water.' transitive
- b. bere-**k** k'i-am-s
child-**ERG** yell-IMPF-PRS.3SG
'The child is yelling.' unergative
- c. ts'ari-**k** şişil-am-s
water-**ERG** burble.IMPF-PRES.3SG
'The water is burbling.' unergative/emission verb
- (2)
- ts'ari kor-un
water.NOM get.cold-IMPF.PRES.3SG
'The water is cooling down.' unaccusative

Evidence for Subject PI: Case

Direct evidence that subject incorporation is available comes from its effect on ERG: it eliminates it, as shown in (4).

- (3) laç'i-k bere-s goyo-k'ap'-u
dog-ERG child-DAT over-attack-PST.3SG
'The dog attacked the child.' Regular Transitive
- (4) bere-s laç'i goyo-k'ap'-u
child-DAT dog over-attack-PST.3SG
'One or more dogs attacked the child.' Pl'ed subject
- (5) *laç'i bere-s goyo-k'ap'-u
dog.NOM child-DAT over-attack-PST.3SG

Evidence for Subject PI: Interpretation

PI'ed subjects yield number neutrality and narrow scope interpretation, reflecting the semantic hallmarks of incorporation (e.g., Bittner 1994, Chung & Ladusaw 2004, Dayal 2011).

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- (6) a. bere-s laç'i goyo-k'ap'-u
child-DAT dog over-attack-PST.3SG
'One or more dogs attacked the child.'
PI → number-neutral
- b. laç'i-k bere-s goyo-k'ap'-u
dog-ERG child-DAT over-attack-PST.3SG
'The dog attacked the child.'
Case → definite singular

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dog-ERG child-DAT over-attack-PST.3SG
'The dog attacked the child.'
Case → definite singular
- (7) bere-s laç'i var goyo-k'ap'-u
child-DAT dog NEG over-attack-PST.3SG
'No dogs attacked the child.' (#some dogs > not)
PI → narrow scope

Evidence for Subject PI: Interpretation

Incorporation is subject to *nameworthiness*:

- ▶ only available if it conveys a canonical activity type
- ▶ modification is allowed only with certain adjectives, those that contribute to describing a canonical activity type (e.g., Mithun 1984; Dayal 2011).

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- (8) Ham oxori-şa *usta* xirsuzi ama-xt-u.
this house-ALL master thief IN-go-PST.3S
Lit.: 'Master thief-entering happened to this house.'
'One or more master thieves entered this house.'

PI → number-neutral

Evidence for Subject PI: word-order

The incorporated NP has to be adjacent to the verb.

- ▶ An adverb cannot occur between the subject NP and the verb when the NP is incorporated and caseless:

- (10) doktori*(-k) ģoma mi-yox-u
 doctor-ERG yesterday 1.OBJ-call-PST.3SG
 ✓'The doctor called me in yesterday.'
 ✗'I got doctor-called yesterday.'

Evidence for Subject PI: word-order

We know that this is *pseudo*-incorporation, not head incorporation because ...

- ▶ an additive particle can occur between the verb and the incorporated NP

→ the NP retains its phrasal status.

(Massam 2001, Öztürk 2009)

- (11) ğoma doktori **ti** mi-yox-u
yesterday doctor TOO 1.OBJ-call-PST.3SG
'I also got doctor_F-called yesterday.'

Subject PI and ϕ -agreement

Question: How does subject PI affect the transitivity of a clause?

- ★ Does the PI'ed subject retain its argument status or are clauses with subject PI intransitive?

To answer this question, we investigate ϕ -agreement facts.

Our key finding:

Agreement facts suggest that there is a subject in the clause when the agent is PI'ed.

Subject PI and ϕ -agreement

- ▶ Laz exhibits ϕ -agreement with both objects and subjects.

Observation:

Subject pseudo-incorporation does NOT eliminate ϕ -agreement with objects.

- ▶ To help you appreciate the facts, we have to introduce some background on ϕ -agreement in Laz →

ϕ -agreement facts

- ▶ Laz exhibits ϕ -agreement with both objects and subjects.
 - ▶ The morphological loci of agreement:
 - ▶ prefixal (tense-invariant)
 - ▶ suffixal (tense-dependent)

(12) m- dzir -am -s
1.SG- see -IMPF -PRS.3SG
'S/he sees me.'

(13) m- dzir -am -t' -u
1.SG- see -IMPF -AUX -PST.3SG
'S/he was seeing me.'

ϕ -agreement facts

What realizes what?

- ▶ suffixal agreement cross-references the subject
- ▶ prefixal agreement cross-references the first/second person object, when there is one, else the subject

(14) m- dzir -em -s
1.SG.OBJ- see -IMPF -PRS.3SG.SUBJ
'S/he sees me.'

(15) b- dzir -em - \emptyset
1.SG.SUBJ- see -IMPF -PRS(.NON3SG.SUBJ)
'I see him/her/it.'

ϕ -agreement facts

Prefixal agreement hosts two types of agreement markers:

- ▶ m-set: OBJECT markers

(16) m- dzir -em -s
 1.SG.OBJ- see -IMPF -PRS.3SG.SUBJ
 'S/he sees me.'

- ▶ v-set: SUBJECT markers (phonologically realized as *b-*, *p-*, *p'*)

(17) b- dzir -em - \emptyset
 1.SG.SUBJ- see -IMPF -PRS(.NON3SG.SUBJ)
 'I see him/her/it.'

ϕ -agreement facts

- ▶ Single-argument verbs exclusively exhibit v-set agreement

- (18) a. **b**-ǧurur, ***m**-ǧurur
1.**SBJ**-die.IMPF, 1.**OBJ**-die.IMPF
'I am dying.' unaccusative
- b. **v**-igzal, ***m**-igzal
1.**SBJ**-walk.IMPF, 1.**OBJ**-walk.IMPF
'I am walking.' unergative

Subject PI and ϕ -agreement

What do we expect in clauses with subject PI?

- ▶ If PI eliminates the argument status of the agent (yielding an intransitive construction), then...
 - ▶ we expect the prefixal agreement to host v-set markers (subject agreement)
 - ▶ because the direct object, i.e., the theme, would be the sole argument in the structure.
 - ▶ Recall single-argument verbs exclusively exhibit v-set agreement.

Subject PI and ϕ -agreement

Observation:

In clauses with subject PI, the prefixal agreement with the theme is still via m-set markers (i.e., object agreement).

- (19) ham oruba-s ma k'oncolozi
this river-LOC 1.SG *koncoloz*
m'- ζ 'op-um-s
1.OBJ-catch-IMPF-PRS.3SG
'In this river, I'd get *koncoloz*-caught.'
koncoloz: witch-like creatures in Laz folklore

- (20) ham oruba-s ma k'oncolozi
this river-LOC 1.SG *koncoloz*
p'- ζ 'op-um- \emptyset
1.SBJ-catch-IMPF-PRS(.NON3SG.SUBJ)
✓ 'In this river, I catch *koncoloz*.'
✗ 'In this river, I'd get *koncoloz*-caught.'

Subject PI and ϕ -agreement

The fact that agreement with the theme has to be regular object agreement (m-set) and cannot be subject agreement shows that...

- ▶ the theme is seen as an object when it comes to agreement.

This is only possible if the structure still has a genuine subject.

What is the subject in clauses with subject PI?

In clauses with subject PI, there are two ways in which there could still be a genuine subject.

- ▶ Possibility #1:
PI'ed subject still serves as the subject of the clause.
- ▶ Possibility #2:
There is a distinct null expletive subject.

We argue for Possibility #2.

The Syntax of Subject PI

We adopt Sağ's (2022) analysis of Turkish PI:

- ▶ The verbal structure has two distinct domains (Öztürk 2005):
 - ▶ The lexical domain of VP: incorporation occurs here
 - ▶ The VP-external functional domain: canonical arguments are introduced here
- ▶ A canonical theme (the direct object and the subject of an unaccusative) is introduced via a little v (v_{Th}) projecting above VP.
- ▶ A canonical agent subject is introduced in spec of a higher v (v_{Ag}).

The Syntax of Subject PI

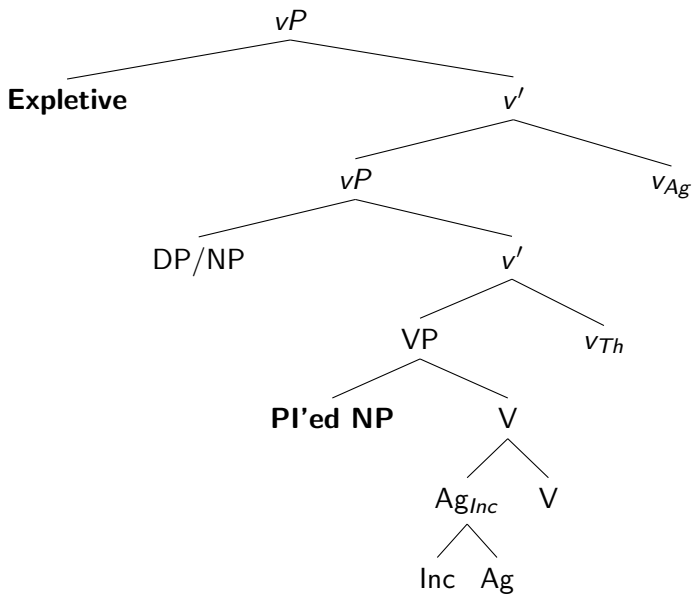
Pseudo-incorporation:

- ▶ Incorporation occurs VP-internally via an incorporating (Inc) head.
- ▶ Inc merges with a thematic head (Agent, when the agent is incorporated) and a verb to create an incorporating verbal complex θ_{Inc} .
- ▶ θ_{Inc} then takes the incorporated (PI-ed) NP as its argument.

Our addition:

- ▶ When subject PI occurs, the little v projection still exists and hosts an expletive in its specifier position.

The Syntax of Subject PI



Further Support

We bring two types of evidence in favor of the expletive analysis through...

1. passivization
2. oblique subject constructions

Subject PI and Passivization

- ▶ In a canonical passive form, the main morphosyntactic reflex of passivization is the pre-root vowel *i-* appearing on the verbal complex.

(21) ma m-dzir-am-s
1.SG 1.OBJ-see-IMPF-PRS.3SG.SUBJ
'S/he is seeing me.' m-set agreement

(22) ma v-i-dzir-er
1.SG 1.SBJ-PASS-see-PASS.IMPF.PRS.NON3SG.SUBJ
'I am being seen.' v-set agreement

- ▶ Note also that agreement with the theme is realized as v-set (subject agreement) rather than m-set (object agreement).

Subject PI and Passivization

- ▶ We take the passive prefix *i-* to signal that the (highest) argument slot is existentially saturated (cf. Öztürk & Taylan, 2011; Eren 2021).
- ▶ This is possible even with single-argument verbs:

(23) bere-pe-k germa-pe-s k'i-am-an
child-PL-ERG mountain-PL-LOC yell-IMPf-PRS.3PL
'Children scream in mountains.'

(24) Germa-pe-s *i*-k'i-en
mountain-PL-LOC PASS-yell-PASS.IMPf.PRS.3SG
'(People) scream in mountains.'

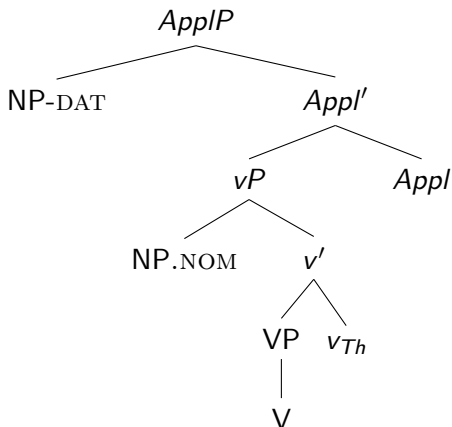
Subject PI and Passivization

- ▶ Our analysis predicts that passivization should not be available in clauses with subject PI since the highest argument slot is occupied by a non-thematic expletive.
- ▶ This prediction is borne out:

(25) *ham oruba-s ma k'oncolozi
this river-loc 1.SG *koncoloz*
v-i-ç'op-er
1.SBJ-PASS-catch-PASS.IMPF
Intended: 'In this river, I would be *koncoloz*-caught.'

Oblique Subject Constructions

Structure of OSCs (cf. Öztürk 2013):



Oblique Subject Constructions

What do we need to pay attention to?

- ▶ The oblique subject *blocks* prefixal agreement with the theme argument.
- ▶ It also determines the form of the APPL prefix, e.g., the 1st/2nd person form of the APPL above.

PI of Oblique Subjects

OSCs also allow the incorporation of the subject:

(27) şk'u iri-**s** ham çitabi
 we all-**DAT** this book.NOM
 m-i-k'itx-ap-ur-an
 1.**OBJ-1**/2.**APPL**-read-CAUS-IMPF-3PL
 'We all have read this book before.'

(28) şk'u iri mzurzi n-**u**-mtsx-ap-un
 we all.NOM bee PV-**3.APPL**-sting-CAUS-IMPF.3SG
 'We all have got bee-stung before.'

- ▶ The agent loses the dative and occurs adjacent to the verb.
- ▶ But the **APPL** is still there. → in the 3rd person form, **u-**

PI of Oblique Subjects

We argue that these facts follow from the expletive analysis.

If there were no expletive subject, we would expect ...

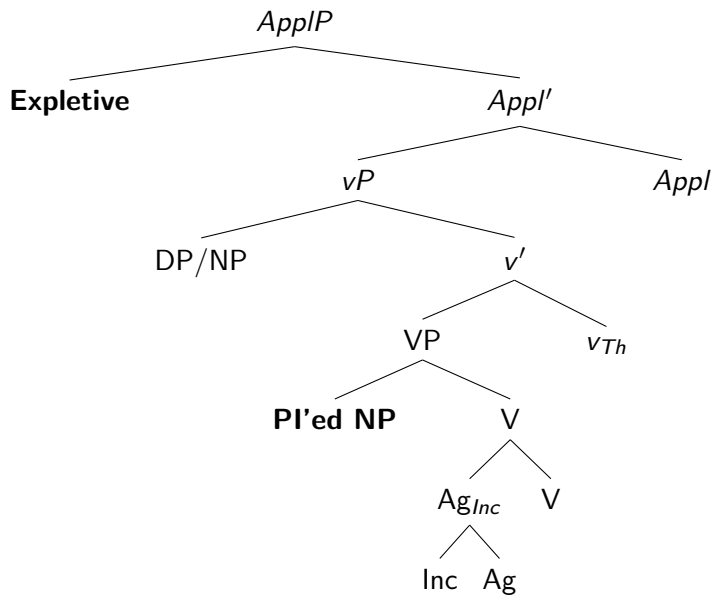
- ▶ some form of agreement with the theme, *ʂk'u iri* (nominative), to be available

given that ...

- ▶ the agent is PI'ed and is inside the VP
- ▶ and arguably not accessible to the agreeing Probe due to being lower than the theme NP.

But we observe neither prefixal nor suffixal agreement with the theme argument.

PI of Oblique Subjects



PI of Oblique Subjects

- ▶ This unavailability of agreement with the theme follows since spec-AppIP hosts a null expletive argument when the agent is PI'ed.

That is, ...

- ▶ The presence of the expletive prevents agreement with the theme,
- ▶ and results in the 3rd person form of the APPL prefix.

Implications

Our study has implications for the cross-linguistic architecture of PI.

- ▶ when subject PI occurs in Turkish, the direct object is accusative-marked, challenging the dependent case-theoretic analysis of accusative.
- ▶ The expletive analysis captures this fact without the need to stipulate movement-based accounts.

Let's see the details.

Implications

Dependent Case Assignment (Baker & Vinokurova 2010; Baker 2015: 48-49):

- ▶ If there are two distinct NPs in the same spell-out domain such that NP1 c-commands NP2, then value the case feature of NP2 as *accusative* unless NP1 has already been marked for case.

Implications

(29) Köpek Ali-yi ısır-dı.
dog Ali-ACC bite-PST
'The dog bit Ali.'

No PI

(30) Ali-yi köpek ısır-dı.
Ali-ACC dog bite-PST
'Ali got dog-bitten.'

Subject PI

- ▶ We do not expect ACC to surface in (30) because there is no NP c-commanding the theme.
- ▶ The fact that ACC does appear along with subject PI is fully predicted under our proposal that the syntax of subject PI crucially involves an expletive in the spec vP position.

Conclusion

We have considered two main cross-linguistic reflections of transitive syntax:

- ▶ ϕ -agreement with objects besides subjects
- ▶ ACC-case assignment

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Conclusion

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- ▶ ϕ -agreement with objects besides subjects
- ▶ ACC-case assignment

We have shown that...

- ★ when subject PI occurs although the PI'ed agent is arguably VP-internal a transitive structure is maintained.

We have argued that...

- ★ this is possible due to an expletive occupying the canonical argument position of the PI'ed NP.

References

- ▶ Atlamaz, Ü. 2013. Cyclic Agreement and Empty Slots in Pazar Laz. *Proceedings of BLS37*.
- ▶ Baker, M.C. & Vinokurova, N. 2010. Two modalities of case assignment: case in Sakha. *Natural Language & Linguistic Theory* 28: 593–642.
- ▶ Bittner, M. 1994. Case, Scope, and Binding. In: Case, Scope, and Binding. *Studies in Natural Language & Linguistic Theory* 30. Springer, Dordrecht.
- ▶ Chung, S., & Ladusaw, W. A. 2004. Restriction and saturation. Cambridge, MA: MIT Press.
- ▶ Dayal, V. 2011. Hindi pseudo-incorporation. *Natural Language & Linguistic Theory*, 29(1): 123-167.
- ▶ Demirok, Ö. 2013. Agree as a Unidirectional Operation: Evidence from Laz. M.A. Thesis. Boğaziçi University.
- ▶ Eren, Ö. (2021). Fake arguments as apparent valency changers: Evidence from Laz. In R. Soo, U. Y. Chow, & Nederveen, S. (Eds.), *Proceedings of the 38th West Coast Conference on Formal Linguistics* (pp. 191-200). Cascadilla Proceedings Project.

References

- ▶ Holisky, D. A. (1991). Laz. In A. C. Greppin, & A. C. Harris (Ed.), *The Indigenous Languages of the Caucasus. Volume 1: The Kartvelian Languages* (pp.395-472). Delmar/New York: Caravan Books.
- ▶ Lacroix, R.(2009). Description du dialecte laze d'Arhavi. Ph.D Dissertation. University of Lumiere Lyon 2.
- ▶ Massam, D. 2001. Pseudo noun incorporation in Niuean. *Natural Language & Linguistic Theory*, 19(1): 153-197.
- ▶ Öztürk, B. 2009. Incorporating Agents. *Lingua*, 119(2): 334-358.
- ▶ Öztürk, B. and M. Pöchtrager 2011. *Pazar Laz*. LINCOM.
- ▶ Öztürk, B. 2013. Low, high and higher applicatives Evidence from Pazar Laz. In Camacho-Taboada V. et. al. (eds.), *Information Structure and Agreement* pp. 275–296. John Benjamins.
- ▶ Sağ, Y. 2022. Bare singulars and singularity in Turkish. *Linguistics & Philosophy*, 45: 741-793.
- ▶ Woolford, E. 2015. Ergativity and Transitivity. *Linguistic Inquiry*, 46(3): 489–531.
- ▶ Tuite, K. (2017). Alignment and orientation in Kartvelian (South Caucasian). In J. Coon, D. Massam, & L. Travis (Eds.), *Oxford Handbook of Ergativity* (pp. 1114-1138). Oxford University Press.