

1 The puzzle

- **Obligatory control constructions** are universally (or overwhelmingly) constrained: even in **syntactically ergative languages**, control is syntactically accusative (Dixon 1994; Deal 2016; Polinsky 2016).
- Most analyses of control appeal to the **structural prominence of the controlled argument** (Landau 2013:108-123, a.o.).
- In **syntactically ergative languages** the surface subject position is occupied by the absolutive theme, but control targets the lower ergative agent \Rightarrow **challenge for existing analyses**.

2 Case study

West Circassian (Adyghe): Northwest Caucasian, polysynthetic, ergative, radical pro-drop¹

Data collected by author in Maykop and Khatazhukay, Republic of Adyghe, Russia, unless otherwise indicated.

Syntactic ergativity: ABS c-commands ERG and IO.

Evidence: reciprocal binding.

3 Φ -agreement as a diagnostic for clause structure

- Position of cross-reference morphology directly reflects syntactic role of verbal argument.

ERG-IO-ABS frame

- (1)

ABS-	IO-	ERG-
tə-	qə- p-	f- jə-
1PL.ABS-	DIR- 2SG.IO-	BEN- 3SG.ERG-
bring.PST		
'S/he brought us to you.'		

ABS-IO frame

- (2)

ABS-	IO-
š ^w ə-	qə- d-
2PL.ABS-	DIR- 1PL.IO-
COM- dance.FUT	
'You(pl) will dance with us.'	

¹GLOSSES ABSolutive; ADverbial; BENefactive; COMitative; DIREctive; ERGative; FUTure tense; IO-indirect object; LOCative; MODal future; OBLique; PLural; PRS-present tense; PST-past tense; RECiprocal; REFlexive; SG-singular.

- Position of reciprocal marking *ze(re)*- correlates with the position of the bound argument.

(3) ERG-IO-ABS frame: ERG binds IO

- a.

te	wənexer	Ø-	IO-	fe-	t-	ERG-
we	house.PL.ABS	3ABS-	REC.IO-	BEN-	1PL.ERG-	do.PST
- b. *

te	wənexer	Ø-	t-	fe-	ze(re)-	ERG-
we	house.PL.ABS	3ABS-	1PL.IO-	BEN-	REC.ERG-	do.PST
'We built houses for each other'						ERG>IO; *IO>ERG

(4) ABS-IO frame: ABS binds IO

- a.

š ^w ə-	qə-	ze-	de-	š ^w eš't	ABS>IO
2PL.ABS-	DIR-	REC.IO-	COM-	dance.FUT	
- b. *

ze-	qə-	ž ^w ə-	de-	š ^w eš't	*IO>ABS
REC.ABS-	DIR-	2PL.IO-	COM-	dance.FUT	
'You(pl) will dance with each other.'					

**Other evidence REC is not voice or de-transitivizing operator (cf. Labelle 2008; Bruening 2004):

- possibility of overt REC pronoun
- case marking of antecedent

\Rightarrow reciprocal agreement can be used to diagnose argument asymmetries.

4 Reciprocals provide evidence for syntactic ergativity

- ABS binds both ERG and IO, regardless of theta-role (Letuchiy 2010; Ershova 2019).

(5) ERG-ABS frame: ABS binds ERG

- a.

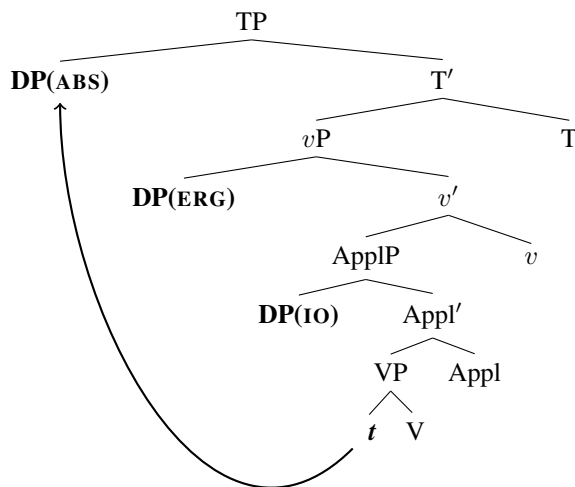
tə-	zere-	λeβ ^w əβ
1PL.ABS-	REC.ERG-	see.PST
- b. *

ze(re)-	t-	λeβ ^w əβ
REC.ABS-	1PL.ERG-	see.PST
'We saw each other.'		

(6) ERG-IO-ABS frame: ABS binds IO

	ABS-	IO-	ERG-	
a.	tə-	ze-	f-	jə- š'aɪ
	1PL.ABS-	REC.IO-	BEN-	3SG.ERG- bring.PST
b. *	ze-	t-	f-	jə- š'aɪ
	REC.ABS-	1PL.IO-	BEN-	3SG.ERG- bring.PST
	'S/he brought us together (lit. to each other).'			

ABS moves to Spec,TP:



5 Obligatory control is syntactically accusative

(7) ERG-ABS frame: ERG is controlled, not ABS

a.	č'elejeɣaʒe-m _i	[_{CP} PRO _i (ERG)	č'alexe-r(ABS)
	teacher.OBL		boy.PL-ABS
	Ø-ə-ləte-n-ew]		rjəɣeʒ'aɪ
	3ABS-3SG.ERG-count-MOD-ADV		3SG.ERG.begin.PST

'The teacher began to count the children.'

b. *	č'ale-xe-m _i	[_{CP} PRO _i (ABS)	č'elejeɣaʒe-m(ERG)
	boy-PL-OBL		teacher-OBL
	Ø-ə-ləte-n-ew]		raɣeʒ'aɪ
	3ABS-3SG.ERG-count-MOD-ADV		3PL.ERG.begin.PST

lit. 'The children began for the teacher to count [them].'

ERG=PRO

***ABS=PRO**

Embedded clause is a CP (Ershova 2019); cf. restructuring (Grano 2015) or raising out of TP (Potsdam and Polinsky 2012): same distributional properties and internal structure as non-control clauses.

+ No true PRO in embedded clause: (i) triggers regular ϕ -agreement; (ii) can be expressed as full DP (possible in non-control clauses too; cf. 'backward control'; Farrell 1995; Polinsky and Potsdam 2002,a.o.).

Controlled argument is spelled out as DP

(8)	pro _i (ERG)	[_{CP} sabjəxe-r(ABS)	Ø-zezewe-n-ew]
		child.PL-ABS	3ABS-REC.IO.hit-MOD-ADV
	raɣeʒ'aɪ		
	3PL.ERG.begin.PST		
	'The children began to compete with each other.'		

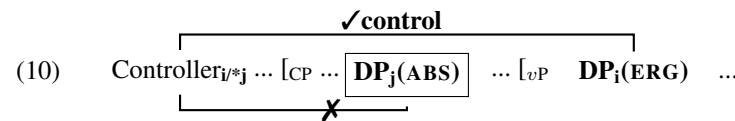
6 Embedded CP has a syntactically ergative clause structure

Reciprocal binding in control CP: ABS binds ERG

(9)	[_{CP} pro _i (ABS)	rec _i (ERG)	Ø-zere-wəč'əž'ə-n-x-ew]	č'əfxe-m _i
			3ABS-REC.ERG-kill-MOD-PL-ADV	person.PL-OBL
	raɣeʒ'aɪ			
	3PL.ERG.begin.PST			
	'People began to kill each other.'			

Control CP: ABS>ERG

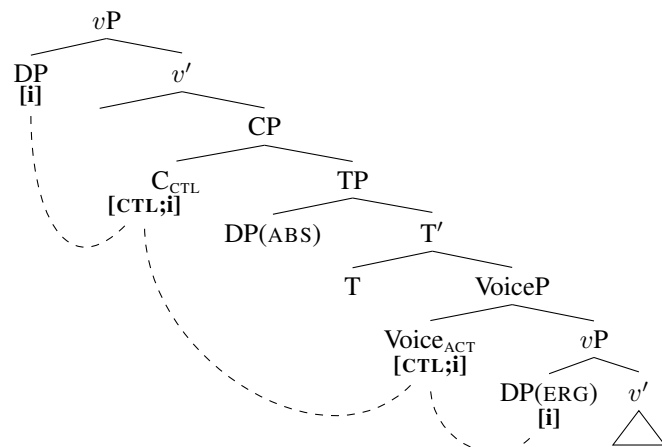
The puzzle: ABS (i) is not eligible for control and (ii) does not act as an intervener



7 Main claim: Control is mediated by Voice

- Following Landau (2000), control is established via Agree.
- Agree-based control involves agreement in an index (ID) feature. See e.g. Rezac (2004); Grosz (2015); Arregi and Hanink (2018) for ID-agreement in other domains.
- ID-agreement is an implementation of control as binding (Chomsky 1981; Borer 1989; Landau 2015).

Control as ID-agreement via Voice



Syntax of Voice⁰:

- selects for vP
- agrees with highest DP in vP in [ID]
- carries the feature [CTL]

Establishing control:

- C_{CTL} is a relativized ID-probe: [ID_{CTL}:_].
See e.g. Bobaljik (2008) on relativized probes.
- ABS doesn't bear [CTL] ⇒ ABS isn't an eligible goal for C_{CTL}.
- C_{CTL} agrees with Voice⁰ in [ID].
- Controller agrees with C_{CTL} in [ID].

Result: feature matching with embedded ERG= **control**.

8 Why Voice? Parallels between control and reflexives

Ershova (2019): WC reflexives are **local subject oriented**, i.e. must be bound by highest DP in vP.

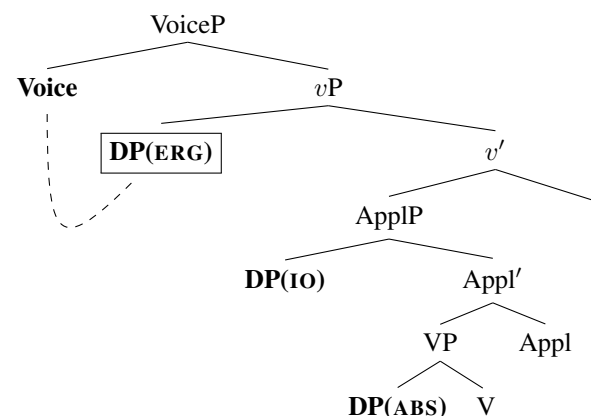
⇒ The choice of antecedent for reflexives is **constrained by Voice⁰**.

See e.g. Labelle (2008); Ahn (2015); Bhatia and Poole (2016) on Voice and LSO reflexives.

How it works:

- Voice⁰ agrees with a DP in its c-command domain.
- Per standard locality constraints, only the highest DP is an eligible goal.
- ⇒ correctly constrains REFL antecedent to highest DP in vP.

REFL antecedent constrained by Voice⁰



Control is similarly constrained: Evidence from two-place unaccusative verbs

š'əpʷəpʃen 'forget': IO-ABS frame

- (11) **ABS- IO-**
 šə- p- š'ə- ɪʷəpʃa -ɪ
 SG.ABS- 2SG.IO- LOC- forget -PST
 'You(IO) forgot about me(ABS).'

- (12) ABS may scramble over IO:
 [ApplP DP(ABS) DP(IO) ... [VP t ...
 ↑

⇒ ABS and IO are equidistant to Voice⁰.

REFL: IO binds ABS or ABS binds IO

- (13)
- | | | | | |
|----|------------------|----------------|-------------|------------|
| a. | ABS- | IO- | | |
| | zə- | s- | š'ə- | ɞʷəpʃež'əɞ |
| | REFL.ABS- | 1SG.IO- | LOC- | forget.PST |
-
- | | | | | |
|----|--------------------------|-----------------|-------------|------------|
| b. | sə- | z- | š'ə- | ɞʷəpʃež'əɞ |
| | 1SG.ABS- | REFL.IO- | LOC- | forget.PST |
| | 'I forgot about myself.' | | | |

- (14)
- | | | | | |
|-------|--|----------------|---------------|-----------|
| Voice | [_v P ... [_{Appl} P | DP(ABS) | DP(IO) | ... |
| | | | | ↓ ✓ AGREE |
| | | | | ↑ ✓ AGREE |

**Cf. REC only allow ABS antecedent.

Prediction of Voice-mediated control: both ABS and IO can be controlled → **confirmed**.

(15) š'əɞʷəpʃen 'forget': both IO and ABS can be controlled

- a. *pro*_i(ERG) [_{CP} **PRO**_i(IO) [*sjənəbž'əç'əɞʷəɞ*
1SG.POSS.youth.OBL
qəʃš'əʃəɞɞɞe-r](ABS) Ø-s-š'ə-ɞʷəpʃe-n-ew]
1SG.IO.happen.PST.PL-ABS 3ABS-1SG.IO-LOC-forget-MOD-ADV
jesəɞəʒ'e
1SG.ERG.begin.PRS
'I am starting to forget events from my childhood.'
- b. *gʷəʃ'əʔeç'əhaxe-m*_i(ERG) [_{CP} **PRO**_i(ABS)
word.long.PL-OBL
Ø-s-š'ə-ɞʷəpʃe-n-ew] *raɞež'əɞ*
3ABS-1SG.IO-LOC-forget-MOD-ADV 3PL.ERG.begin.PST
'Long words are beginning to be forgotten by me.'

IO=PRO

ABS=PRO

9 Implications

- Importance of Voice⁰ in two classic subjecthood diagnostics (reflexives and control)
⇒ no single subject position per e.g. McCloskey (1997) and no uniform notion of subjecthood.
- Possible explanation for universal lack of syntactic ergativity in control.

Alternative account of control and syntactic ergativity (Polinsky 2016):

ERG=PP; syntactically ergative languages lack obligatory control of ERG.

~ Applicable only to languages where ABS stays low: if ABS c-commands ERG, why is only ERG eligible for non-obligatory control?

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