



**West Circassian (Adyghe):** Northwest Caucasian, polysynthetic, ergative alignment, radical pro-drop  
Data from the Khatazhukaj rural settlement, Republic of Adygia, Russia, unless otherwise indicated.

**Reflexive and reciprocal binding expressed morphologically:**  
personal prefix replaced with prefix for anaphor ( $\phi \rightarrow \text{REFL/REC}$ )

## Puzzle #1: “Backward binding” for reciprocals

1. In an ERG-ABS frame, reciprocal marker *ze(re)*- replaces the **ergative** marker (Letuchiy 2010).

Order of prefixes for ERG-ABS frame			
(1)	<b>Theme-</b>	<b>Agent-</b>	Tense- Root
	we-	t-	e- še
	2SG.ABS-	1PL.ERG-	PRS- know
	‘We know you.’		

Reciprocal: ABS>ERG			
(2)	a.	tə-	<b>zer-</b> e- še
		1PL.ABS-	<b>REC.ERG-</b> PRS- know
		‘We know each other.’	
	b.	* <b>ze-</b> t-	e- še
		<b>REC.ABS-</b> 1PL.ERG-	PRS- know

2. In an ERG-IO<sub>i</sub>-ABS<sub>i</sub> frame, reciprocal marker replaces the **applied object** marker.

Order of prefixes for ERG-IO-ABS frame					
(3)	<b>Theme-</b>	<b>Applicative-</b>	<b>Agent-</b>	Root	-Tense
	tə-	qə- p-	f- jə-	š’a	-ɪ
	1PL.ABS-	DIR- 2SG.IO-	BEN- 3SG.ERG-	bring	-PST
	‘S/he brought us to you.’				

Reciprocal: ABS(object)>IO					
(4)	a.	tə-	<b>ze-</b> f- jə-	š’a	-ɪ
		1PL.ABS-	<b>REC.IO-</b> BEN-	3SG.ERG-	bring -PST
		‘S/he brought us together (= to each other).’			
	b.	* <b>ze-</b> t-	f- jə-	š’a	-ɪ
		<b>REC.ABS-</b> 1PL.IO-	BEN- 3SG.ERG-	bring	-PST

## Main Claim

- Despite appearances, reciprocal binding is established via **c-command**.
- ABS>ERG/IO, because West Circassian is **syntactically ergative: DP<sub>ABS</sub> moves to Spec,TP**.

## Puzzle #2: Reflexives and syntactic accusativity

In an ERG-ABS frame, reflexive marker *zə*- replaces the **absolutive** marker.

Reflexive: ERG>ABS			
(5)	<b>Theme-</b>	<b>Agent-</b>	Root -Tense
a.	<b>zə-</b> s-		thač’ə -ɪ
	<b>REFL.ABS-</b> 1SG.ERG-		wash -PST
b.	* sə-	<b>zə-</b>	thač’ə -ɪ
	1SG.ABS-	<b>REFL.ERG-</b>	wash -PST
	‘I washed myself.’		

## Claim #2

Reflexives are **local subject oriented**  
= can only be bound by a **non-derived** subject.  
DP<sub>ABS</sub> in Spec,TP is derived  
⇒ cannot bind a reflexive.

## Reciprocal binding is via c-command

1. In an ABS-IO frame (ABS=agent; IO=theme), reciprocal marker replaces the **indirect object** marker.

Order of prefixes for ABS-IO frame			
(6)	<b>Agent-</b>	<b>Theme-</b>	Root
	t-	ja-	pλə
	1PL.ABS-	3PL.IO-	look
	‘We are looking at them.’		

Reciprocal:ABS>IO			
(7)	a.	tə-	<b>z-</b> e- pλə
		1PL.ABS-	<b>REC.IO-</b> PRS- look
	b.	* <b>ze-</b> t-	e- pλə
		<b>REC.ABS-</b> 1PL.IO-	PRS- look
		‘We are looking at each other.’	

2. In an ERG<sub>i</sub>-IO<sub>i</sub>-ABS frame, reciprocal marker replaces the **applied object** marker.

Reciprocal: ERG>IO			
(8)	<b>Theme-</b>	<b>IO-</b>	<b>Agent-</b> Tense- Root
	Ø-	<b>ze-</b> t-	e- tə
	3ABS-	<b>REC.IO-</b> 1PL.ERG-	PRS- give
	‘We are giving it to each other.’		

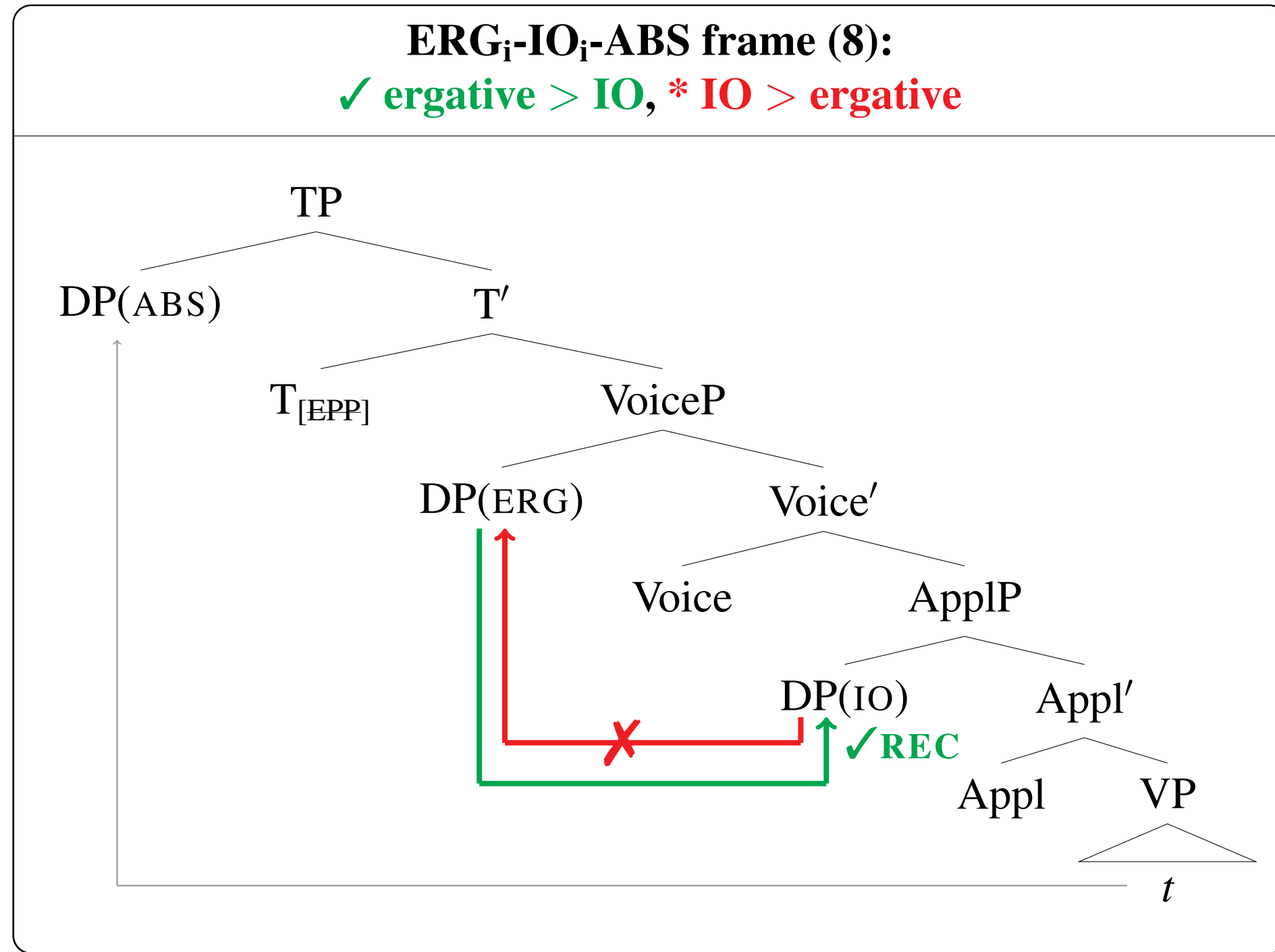
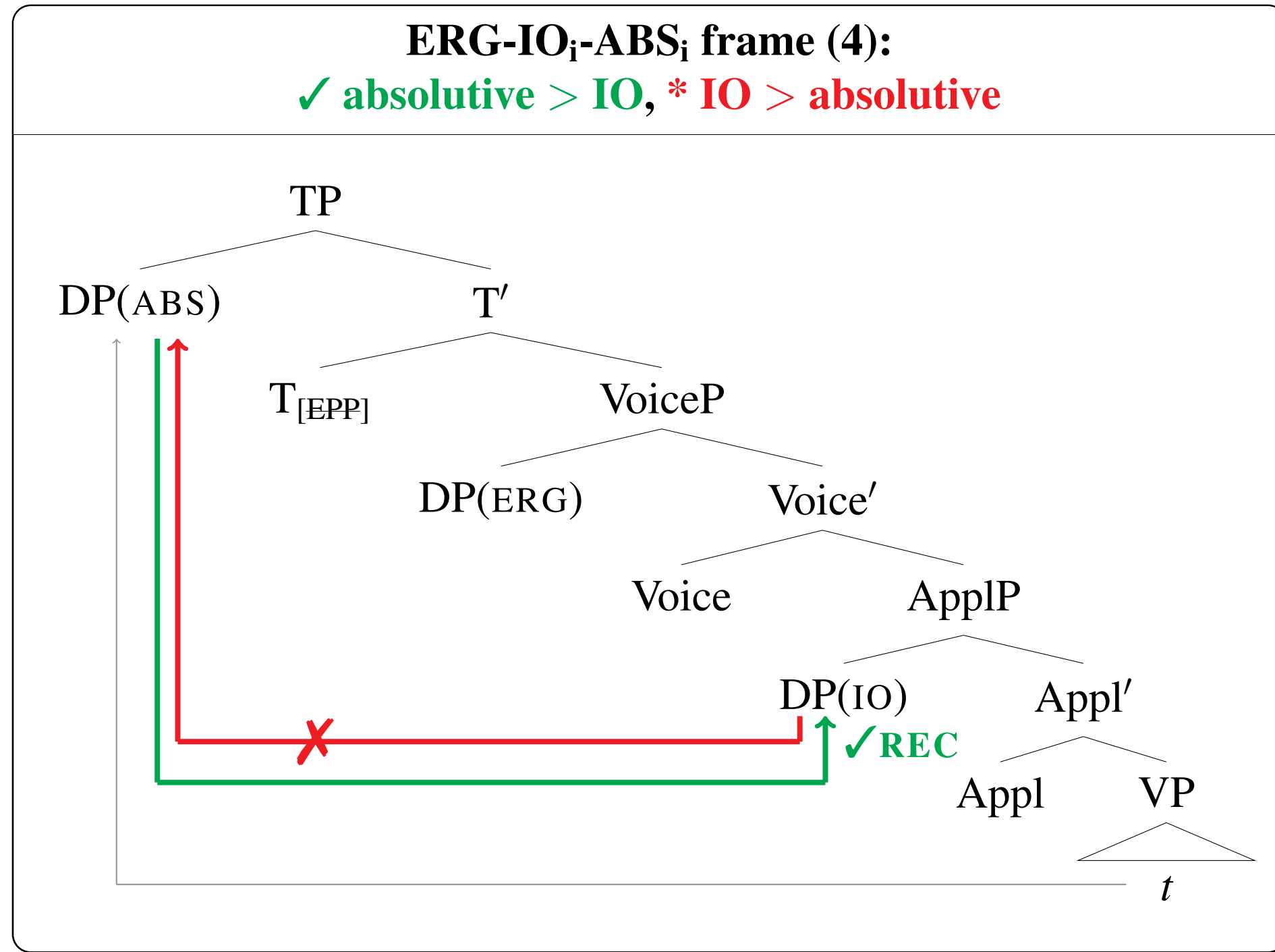
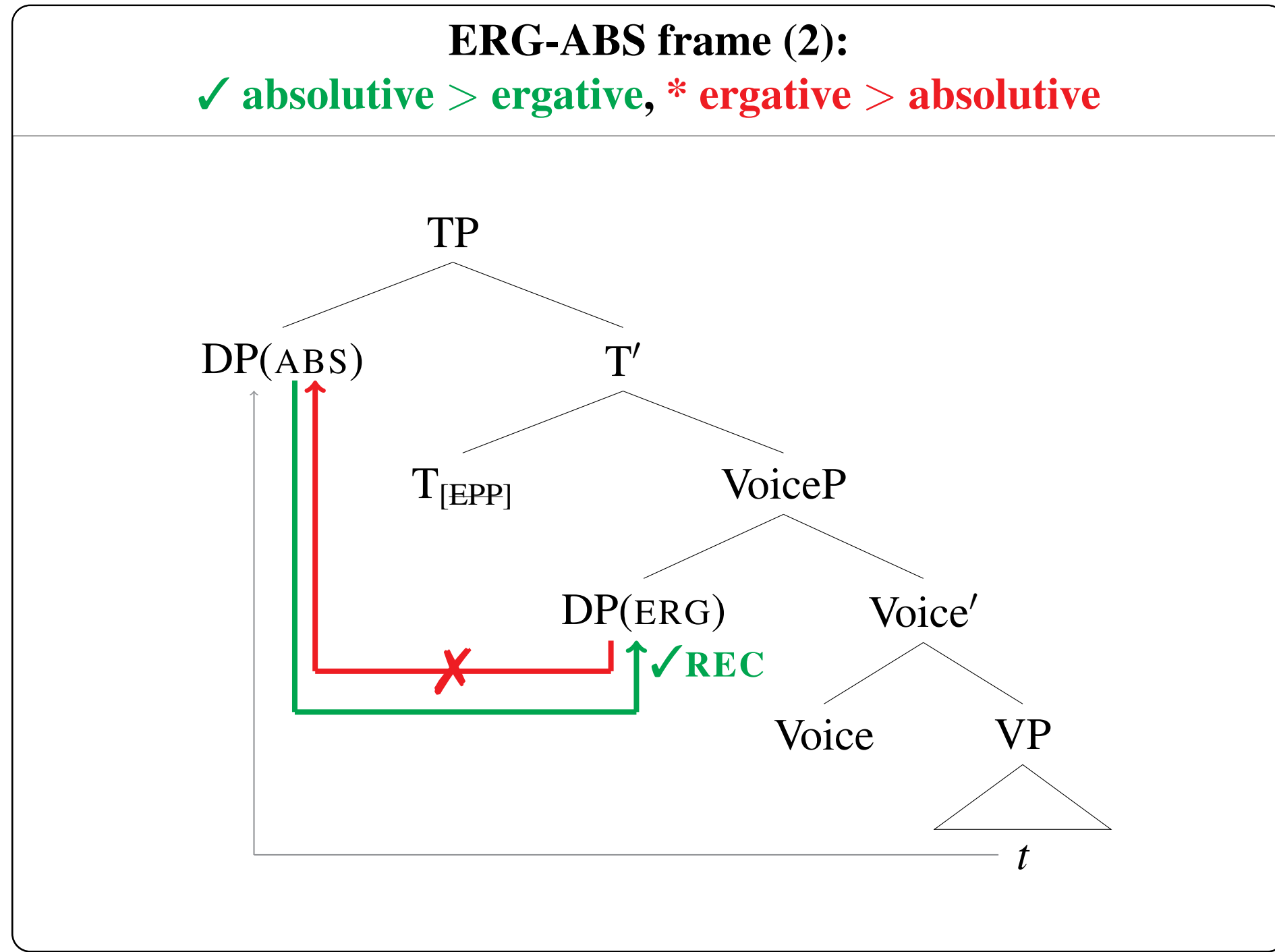
Directionality of reciprocal binding		
<b>Agent</b>	<b>IO</b>	<b>Theme</b>
ERG	>IO	<ABS
ERG	<	ABS
ABS	>	IO

⇒ DP<sub>ABS</sub> c-commands DP<sub>ERG</sub> and DP<sub>IO</sub>

## Deriving a high absolutive

- Ergative DP and IO** are assigned inherent case by Voice<sup>0</sup> and Appl<sup>0</sup> and **remain in-situ within VoiceP** (Legate 2008; Pyllkänen 2008).
- Absolutive DP** is assigned structural case by T<sup>0</sup> and **raises to Spec,TP** to satisfy [EPP].
- Other evidence for high ABS: conditions on parasitic gap licensing (Ershova 2017).
- Previous proposals of high ABS:  
Bittner & Hale (1996); Aldridge (2008); Coon et al. (2014), a.o.

## Reciprocal binding is via c-command



## Reflexives are local subject oriented

**Problem:** Reflexives behave as if DP<sub>ERG</sub> c-commands DP<sub>ABS</sub> (5).

**Answer:** High position of DP<sub>ABS</sub> is **derived** + reflexives may only be bound by **non-derived** subjects.

## West Circassian reflexive zə-:

1. cannot be used to mark co-reference between two non-subject arguments in an ERG-IO-ABS frame

Reflexive: *IO>ABS(object)			
(9)	<b>Zi/ɛj-</b> a <sub>j</sub> -	fe- s <sub>i</sub> -	thač’ə -ɪ
	<b>REFL.ABS-</b> 3PL.IO-	BEN- 1SG.ERG-	wash -PST
	a. ‘I washed myself for them.’		
	b.	* ‘I washed them for themselves.’	

Reflexive: *ABS(object)>IO			
(10)	Ø <sub>j</sub> - <b>zə/ɛj-</b> fe- s <sub>i</sub> -	thač’ə -ɪ	-x
	3ABS-	<b>REFL.IO-</b> BEN-	1SG.ERG- wash -PST -PL
	a. ‘I washed them for myself.’		
	b.	* ‘I washed them for themselves.’	

Compare with reciprocal marking co-reference of IO and ABS(object) in (4).

2. for an unaccusative verb with high applicative, may replace **absolutive theme** marker (11)\*

\* (11b) is reanalysis: applicative boosts agentive interpretation, unaccusative → unergative

Compare with unergative verb (12): reflexive **cannot** replace absolutive agent marker.

Reflexive: unaccusative + applicative			
(11)	<b>Theme-</b>	<b>IO-</b>	
a.	<b>zə-</b> s-	š’w’e- š’tə -ɪ	
	<b>REFL.ABS-</b> 1SG.IO-	MAL- freeze -PST	
b.	? sə-	<b>zə-</b> š’w’e- š’tə -ɪ	
	1SG.ABS-	<b>REFL.IO-</b> MAL- freeze -PST	
	‘I froze against my will.’		

Reflexive: unergative + applicative			
(12)	<b>Agent-</b>	<b>IO-</b>	
a.	* <b>zə-</b> qə- s-	fe- š’w’ež’əɪ	
	<b>REFL.ABS-</b> DIR- 1SG.IO-	BEN- dance.PST	
b.	sə- qə- <b>zə-</b> fe- š’w’ež’əɪ		
	1SG.ABS-	DIR- <b>REFL.IO-</b> BEN-	dance.PST
	‘I danced for myself.’		

## Local subject oriented reflexives in other languages

E.g. *se/si* in French and Italian (Rizzi 1986; Sportiche 2014, a.o.); *-koL* in Kannada (Lidz 1996, 2001)

French <i>se</i> (Sportiche 2014:104)	
Can be bound by a deep subject:	Cannot be bound by a derived subject:
(13) Jean <sub>i</sub> se <sub>j</sub> présente Pierre	(14) * Pierre <sub>i</sub> se <sub>j</sub> sera présenté
Jean <b>to-himself</b> introduces Pierre	Pierre <b>to-himself</b> will-be introduced

## ACKNOWLEDGMENTS

The author thanks the speakers of West Circassian for sharing their language, and especially Svetlana K. Alishaeva and Susana K. Khatkova. This work was partially funded by the Graduate Research Aid Initiative in Linguistics from the University of Chicago and the Dissertation Research Grant from the Association for Slavic, East European, and Eurasian Studies.

## GLOSSES

ABSolutive; BENefactive; DIRective; ERGative; IO=indirect object; MALefactive; OBLique; PLURAL; PRS=present tense; PST=past tense; RECiprocal; REFLEXive; SG=singular.

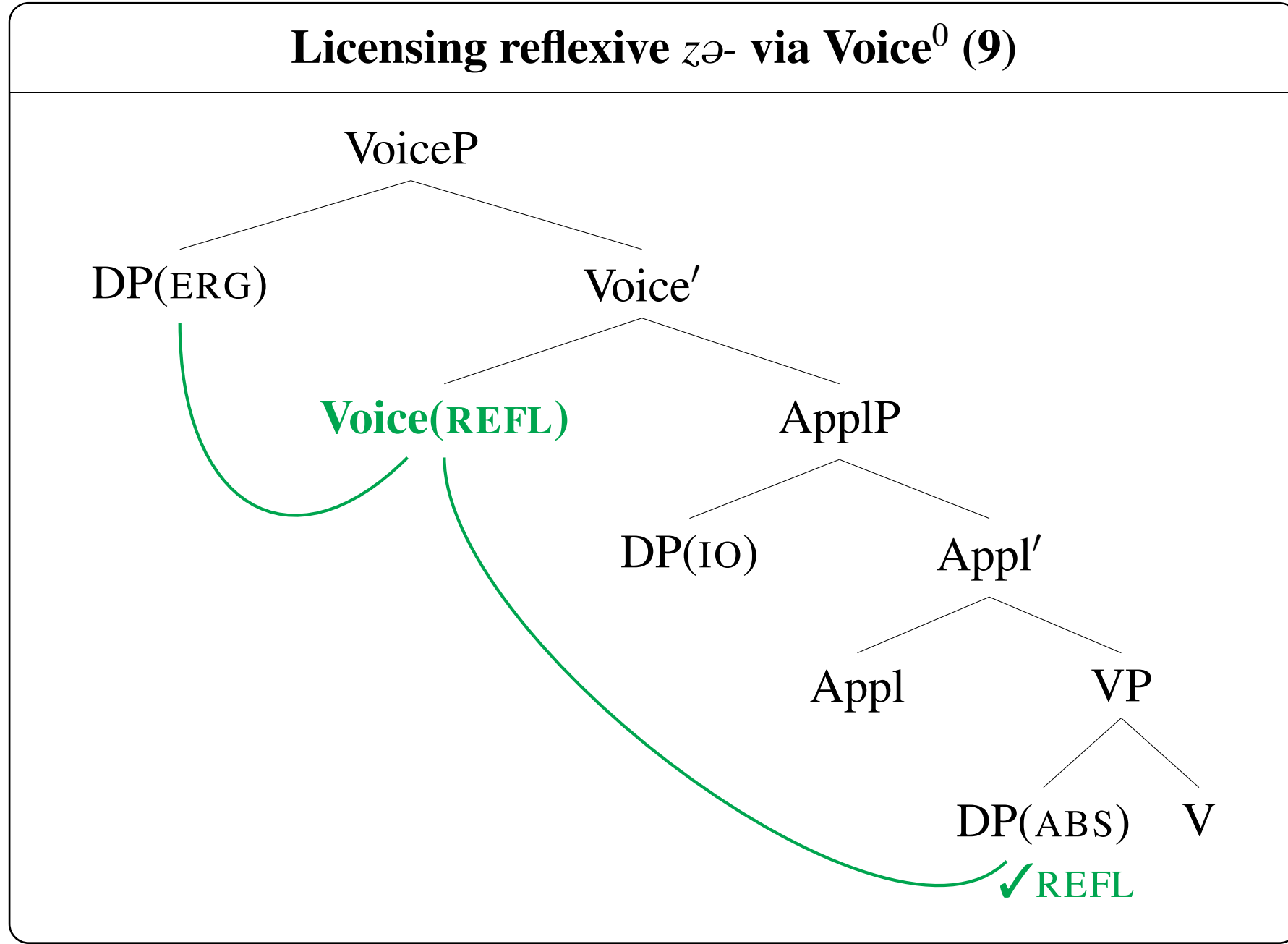
## Reflexive Voice<sup>0</sup>

Building on Labelle (2008); Sportiche (2014); Ahn (2015)

- zə-* is a reflex of agreement with a semantically vacuous DP (= without an index)

- Reflexive Voice<sup>0</sup>:

- Introduces the external argument
- Licenses the reflexive via feature [REFL]
- Establishes identity between missing internal argument **and external argument**



**REFL = semantically vacuous DP:**

- Triggers agreement and is assigned case like other DPs  
⇒ accounts for position of *zə-*
- Does not have an index  
⇒ does not trigger Condition B/C violation when REFL moves to Spec,TP.

## Implications

Syntactic ergativity effects in anaphor binding necessitate a **structural account**.

DP<sub>ABS</sub> is the **surface subject** of the clause: it c-commands all other arguments, including DP<sub>ERG</sub>.

## REFERENCES

- Ahn 2015. UCLA diss.
- Aldridge 2008. In *Sophia Linguistica*.
- Bittner & Hale 1996. In *LI*.
- Coon, Mateo Pedro & Preminger 2014. In *Linguistic Variation*.
- Ershova 2017. Presented at NELS48.
- Labelle 2008. In *NLLT*.
- Legate 2008. In *LI*.
- Letuchiy 2010. In *Ergativity, valency and voice*.
- Lidz 1996. UDel diss.
- Lidz 2001. In *NLLT*.
- Pyllkänen 2008. *Introducing arguments*.
- Rizzi 1986. In *Syntax of pronominal clitics*.
- Sportiche 2014. In *Locality*.