

# Licensed to license

Deficient probes in West Circassian nominalizations

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Non-deficient probes result from licensing by the highest head in the extended projection –  $C^0$ .



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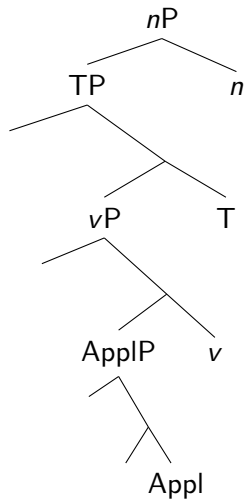
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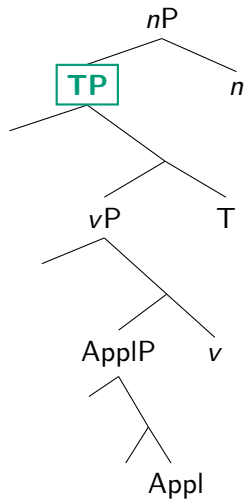
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**Evidence:** deficient probes in West Circassian nominalizations.

# Nominalization



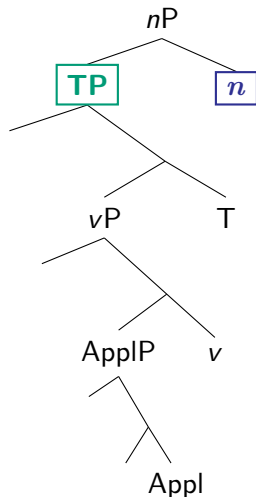
# Nominalization



► verbal extended projection (=TP)

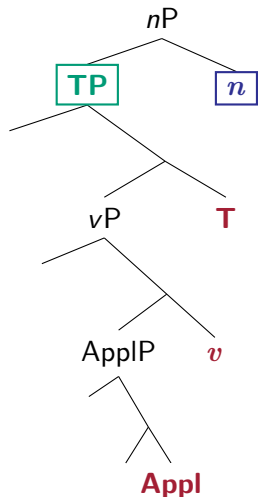


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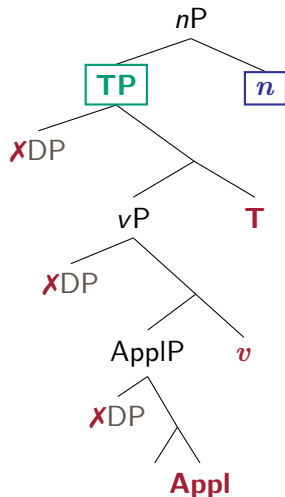
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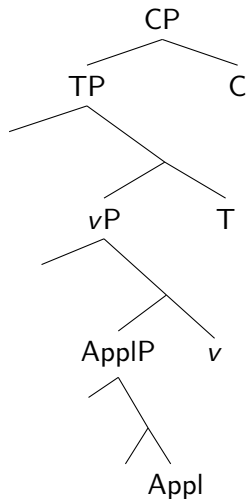
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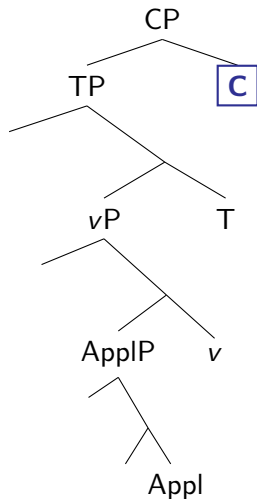
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# Deficiency in the absence of $C^0$



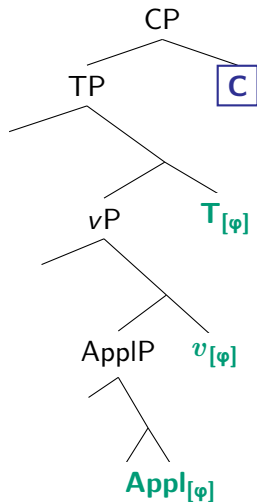
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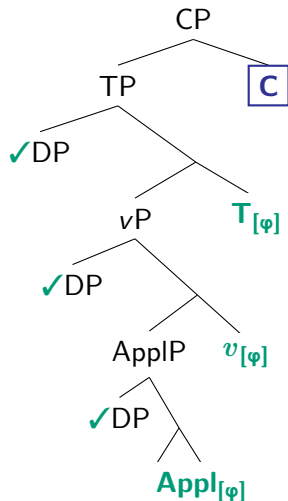
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- ▶ Background on West Circassian



# Roadmap

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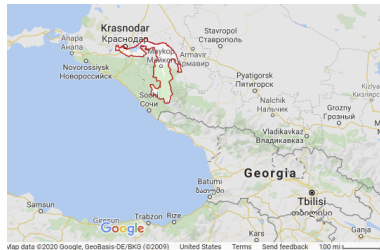
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**West Circassian** (or Adyghe):

- ▶ Northwest Caucasian

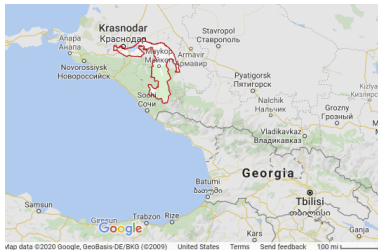
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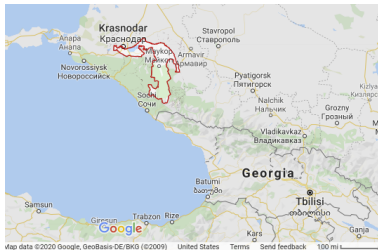
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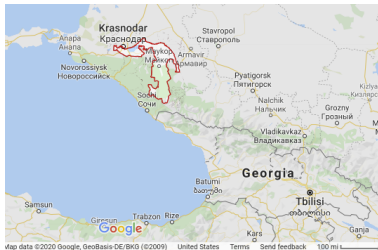
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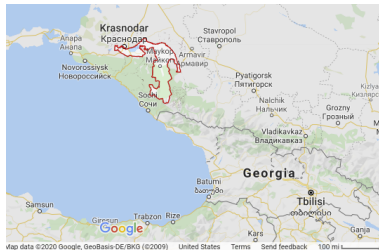
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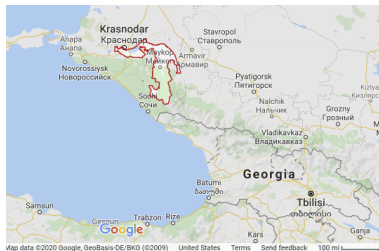


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# West Circassian is polysynthetic

Head marking and pro-drop:

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*səqəpfarjəbele<sup>w</sup>əb*

sə-	qə-	p-f-	a-r-	jə-	be-
1SG.ABS-	DIR-	2SG.IO+BEN-	3PL.IO+DAT-	3SG.ERG-	CAUS-
le <sup>w</sup> ə -b					
see	-PST				

‘He showed me to them for your sake.’

(Korotkova and Lander 2010:301)

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# Case marking

**-r (ABS):**

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- ▶ intransitive subject

**S**

mə pšaše-**r**      daxew qaš<sup>w</sup>e  
this girl-**ABS**      well      dances

‘This girl dances well.’



# Case marking

## -r (ABS):

- ▶ intransitive subject
- ▶ direct object

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A

O

sabəjxe-**m**      haxe-**r**      qaλeɸ<sup>w</sup>əɸ  
children-**OBL**      dogs-**ABS**      saw

‘The children saw the dogs.’

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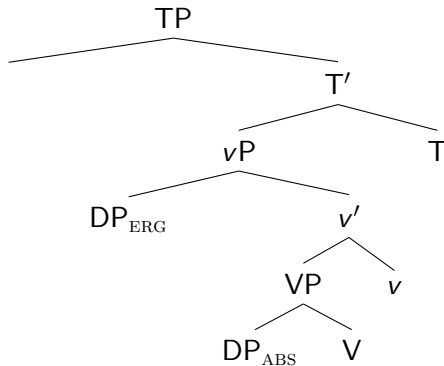
‘The children saw the dogs.’

IO

mafe-qes ježape-**m**      seḵ<sup>w</sup>e  
day-each school-**OBL**      go

‘I go to school every day.’

# High absolutive

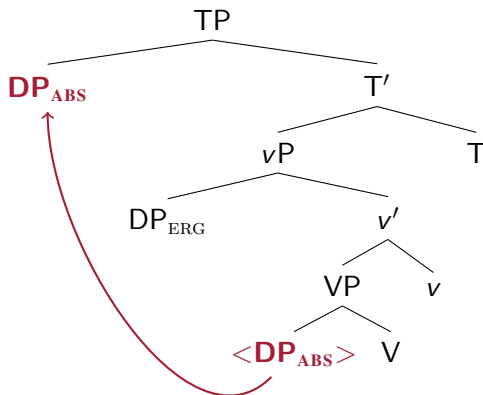


(See also Bittner and Hale 1996; Manning 1996; Baker 1997; Aldridge 2008; Yuan 2018, 2022; Coon et al. 2021;

Royer to appear, a.o.)

# High absolutive

- ▶  $DP_{ABS}$  moves to Spec,TP



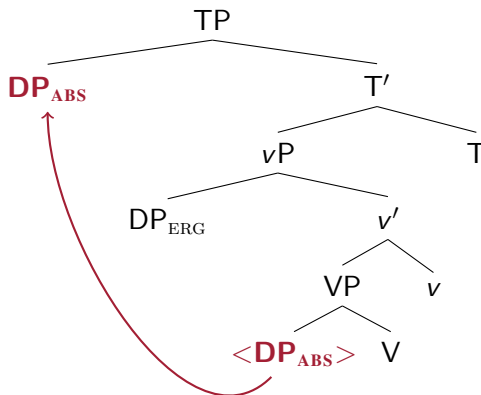
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- ▶ evidence from parasitic gaps and reciprocal binding

(Ershova 2019, 2021, to appear b)



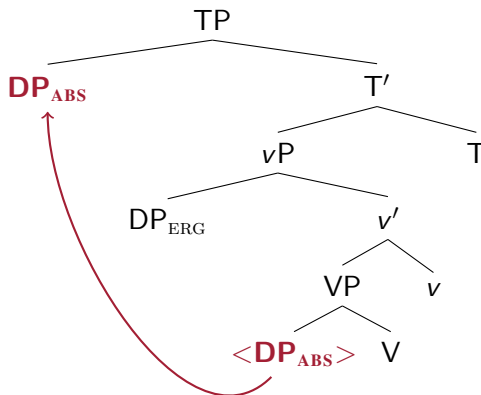
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Reciprocals are subject to Condition A

= must be bound by a local c-commanding antecedent

(Ershova 2019, to appear b)

# Reciprocal agreement

**ABS** external argument binds **IO**

š<sup>w</sup>ə-      qə-    d-      de-    š<sup>w</sup>eš't  
2PL.ABS- DIR- 1PL.IO- COM- dance.FUT

**BASELINE**

'You(pl) will dance with us'

# Reciprocal agreement

**ABS** external argument binds **IO**

**you**

↓  
š<sup>w</sup>ə-

2PL.ABS-

**with us**

qə-

DIR-

↓  
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# Reciprocal agreement

**ABS** external argument binds **IO**

⇒ REC replaces IO agreement

**you**

**with each other**

↓  
š<sup>w</sup>ə-

qə-

↓  
ze-

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**RECIPROCAL**

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axe-me            ʔeg<sup>w</sup>əbʒe-r Ø-       ze-       r-       a-            təʒ'ə  
that.PL-OBL   cup-ABS    3ABS- REC.IO- DAT- 3PL.ERG- give

‘They pass the cup to each other.’

(<http://adyghe.web-corpora.net/>)

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# Reciprocal agreement does not affect transitivity

**ERG** binds **IO**

- ▶ REC replaces IO agreement
- ▶ ERG antecedent bears OBL (=ERG) case

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**ABS** binds **IO**

sabəjxe-r    Ø-    z-    e-    pλəž'əx  
child.PL-ABS 3ABS- REC.IO- DAT- look.PL

‘The children are looking at each other.’

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child.PL-**ABS** 3ABS- **REC.IO-** DAT- look.PL

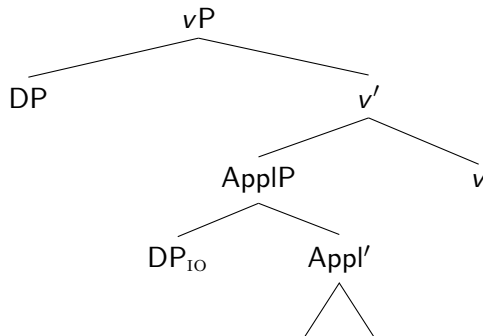
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# Reciprocal binding is established via c-command

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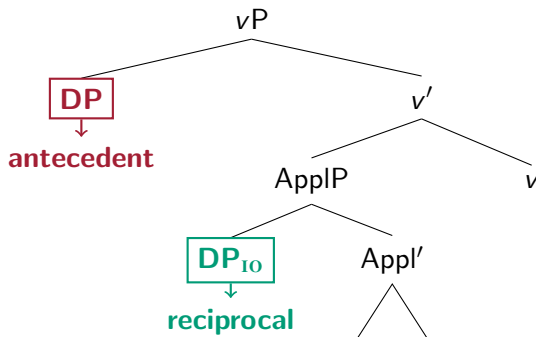
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- ▶ ABS theme binds ERG agent and applied object (IO)

# Reciprocals and high absolutive

Reciprocals provide evidence for high absolutive syntax:

- ▶ reciprocals are bound by a c-commanding antecedent
- ▶ ABS theme binds ERG agent and applied object (IO)

**ABS c-commands both ERG and IO.**

# High ABS binds applied object

tə- qə- p- f- jə- š'aɸ  
1PL.ABS- DIR- 2SG.IO- BEN- 3SG.ERG- bring.PST

'S/he brought us to you.'

**BASELINE**

# High ABS binds applied object

us                      you  
↓                      ↓  
tə-                      p-  
1PL.ABS-              2SG.IO-      qə-      f-      jə-      š'aɸ  
DIR-      BEN-      3SG.ERG-      bring.PST

'S/he brought us to you.'

**BASELINE**

# High ABS binds applied object

us      each other  
↓      ↓  
tə-      ze-      f-      jə-      š'aɞ  
1PL.ABS-   REC.IO-   BEN-   3SG.ERG-   bring.PST



'S/he brought us together (= to each other).'

**RECIPROCAL**

# High ABS binds applied object

each other

us

\*   f- jə- š'aB  
REC.ABS- 1PL.IO- BEN- 3SG.ERG- bring.PST

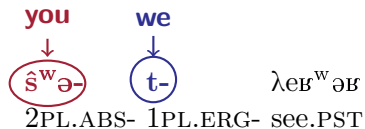
'S/he brought us together (= to each other).' **RECIPROCAL**

$\hat{s}^w \text{ə-}$        $t\text{-}$        $\lambda e \mathfrak{B}^w \text{ə} \mathfrak{B}$   
2PL.ABS- 1PL.ERG- see.PST

‘We saw you(pl).’

**BASELINE**

# High ABS binds ERG

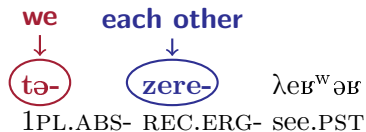


**BASELINE**

‘We saw you(pl).’



# High ABS binds ERG



**RECIPROCAL**

‘We saw each other.’

# High ABS binds ERG

each other

we

↓  
\*zere-

↓  
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$\lambda e \mathcal{B}^w \partial \mathcal{B}$

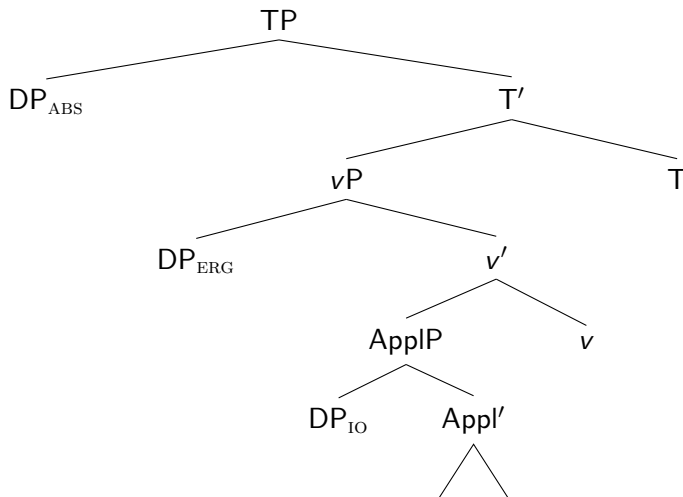
REC.ABS- 1PL.ERG- see.PST

RECIPROCAL

Intended: 'We saw each other.'

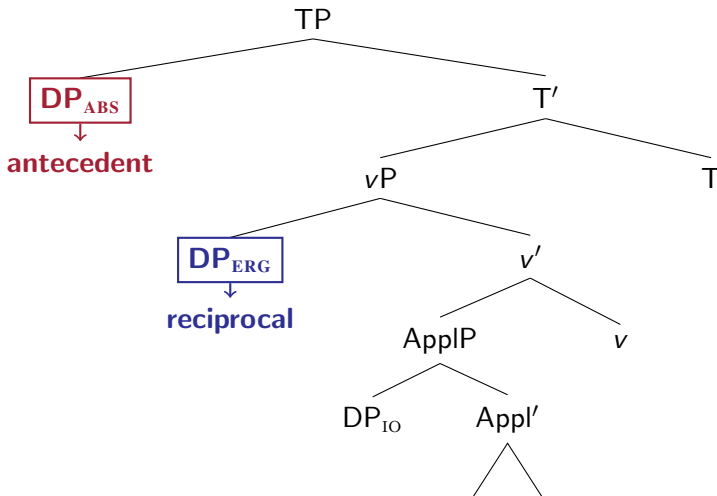
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**ABS** binds reciprocals in **ERG** and **IO** positions:



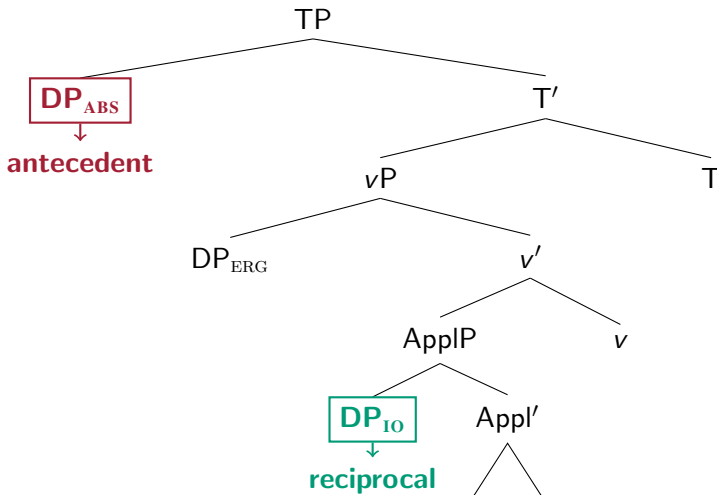
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Nominalizations include structure up to TP,  
but are deficient in  $\varphi$ -agreement and licensing without  $C^0$ .



- ▶ Background on West Circassian
- ▶ **Functional structure of nominalizations**
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# Noun phrase structure

tjə-            še-n-            xebze -daxe            -xe -r  
1PL.POSS- lead-NML rule    -beautiful -PL -ABS  
'our beautiful rules of conduct' (Ershova 2020:431)

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# Nominalizations: deficient verbal extended projection

Ershova (2020)

laʁe-xe-r	Ø-	s-	e-	thač'ə	<b>FINITE</b>
dish-PL-ABS	3ABS-	1SG.ERG-	DYN-	wash	
'I am washing dishes.'					

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- ▶ nominalizations include causatives

jə-            xebze-    ʁe-      ḳ<sup>w</sup>edə -č'e  
3SG.POSS- rule-    CAUS- perish -NML

'its destruction (= causing to perish) of traditions'

# $v$ and Appl are present in nominalizations

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day-each       2SG.POSS- store-    go    -NML I am tired

'I'm tired of your going to the store every day.'

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'I'm tired of your going to the store every day.'

Compare with non-derived nouns:

\* **mafe-qes**    pjerjedač  
day-each        broadcast

Intended: 'everyday program'



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axer          Ø-          ze-f-          e-          g<sup>w</sup>əʔež'ə -x  
they.ABS 3ABS- REC.IO-BEN- DYN- endeavor -PL

'They work hard for each other.'

**FINITE**

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'their manner of working hard for each other'

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3ABS- DIR- REC.ERG- DYN- CAUS- dance -RE -PL

'They are making each other dance.'

**FINITE**



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why is the verbal syntax so diminished?

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## The solution:

Verbal  $\varphi$ -probes are present in nominalizations,  
but **they are deficient** in the absence of  $C^0$ .

- ▶ Background on West Circassian
- ▶ Functional structure of nominalizations
- ▶  $\varphi$ -probe licensing by  $C^0$
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## West Circassian nominalizations:

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( $\text{Appl}^0$ ,  $v^0$ , and  $T^0$ ).

# The analysis in a nutshell

$\varphi$ -probes **must be licensed** to agree with and license nominal arguments.

- ▶  $\varphi$ -probes are merged as deficient  
⇒ cannot expone full agreement and cannot license nominals.
- ▶ Full  $\varphi$ -feature probing must be licensed by the highest head in the extended projection –  $C^0$ .

## West Circassian nominalizations:

- ▶ Contain structure up to TP, including verbal  $\varphi$ -probes  
( $\text{Appl}^0$ ,  $v^0$ , and  $T^0$ ).
- ▶ The  $\varphi$ -probes are **deficient** in the absence of  $C^0$ .

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(e.g. in nominalizations)

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tə-      q-      jə-      be-č'ə-ž'  
**1PL.ABS- DIR- 3SG.ERG-** CAUS-rise-again

's/he raised us again'

**FINITE**

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jə-      qe-      ʁe-č'ə-n  
3SG.POSS- DIR- CAUS-rise-NML

'its raising' (<http://adyghe.web-corpora.net/>)

**NOMINALIZATION**

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šheč'afe Ø- a- f- jə- šə-š'təʁ  
respect **3ABS- 3PL.IO- BEN- 3SG.ERG-** do-IPF.PST

'He was showing respect for them.'

**FINITE**

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**FINITE**

pš'ə- šheč'efe- fe- šə-č'e  
prince- respect- **BEN-** do-NML

'showing respect for princes'

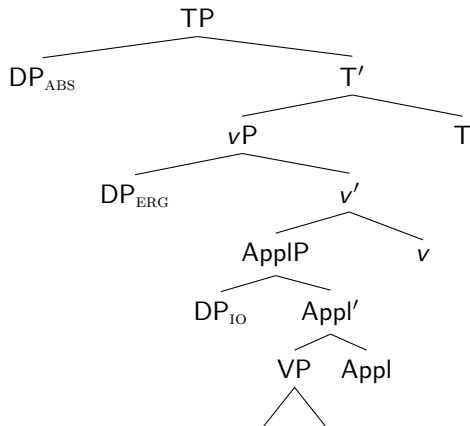
**NOMINALIZATION**

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# Verbal $\phi$ -agreement

w-            a-de-            s-            š'aB  
2SG.ABS- 3PL.IO-COM- 1SG.ERG- bring.PST

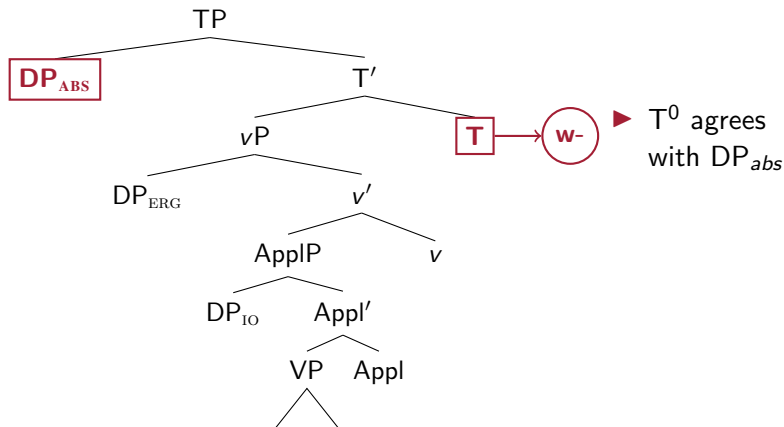
'I brought you with them.'



# Verbal $\phi$ -agreement

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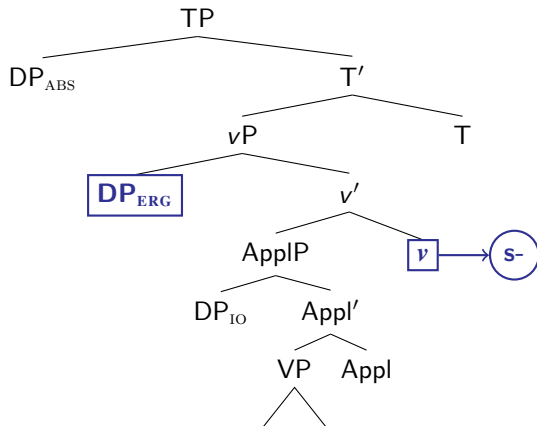




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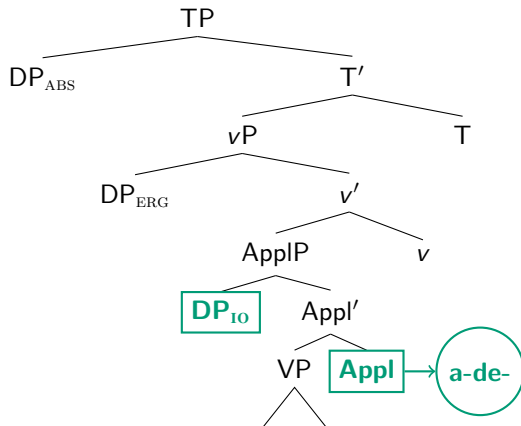
►  $T^0$  agrees with  $DP_{abs}$

►  $v^0$  agrees with  $DP_{erg}$

# Verbal $\phi$ -agreement

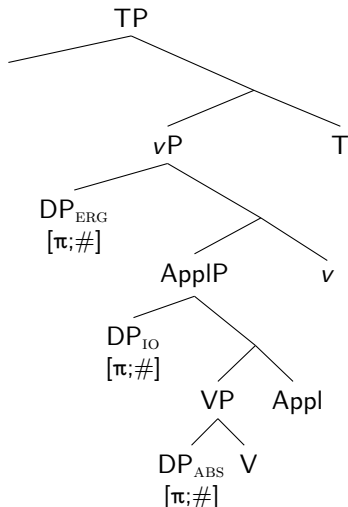
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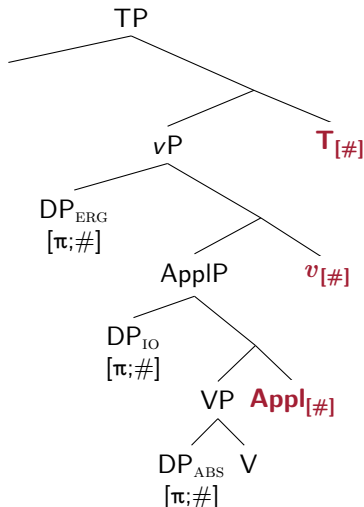
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- ▶  $Appl^0$  agrees with  $DP_{io}$

# Full $\varphi$ -agreement is licensed by $C^0$



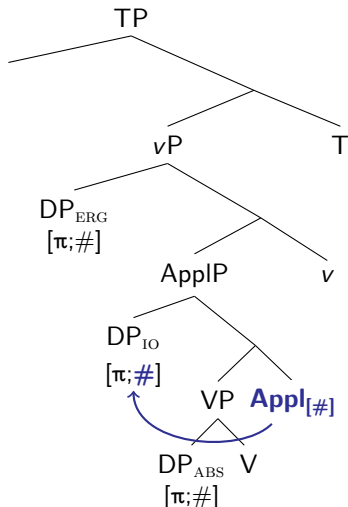
- $\text{Appl}^0$ ,  $v^0$  and  $T^0$  are merged deficient:  
✓ number ✗ person

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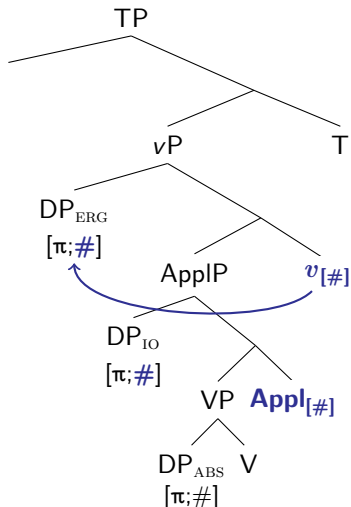
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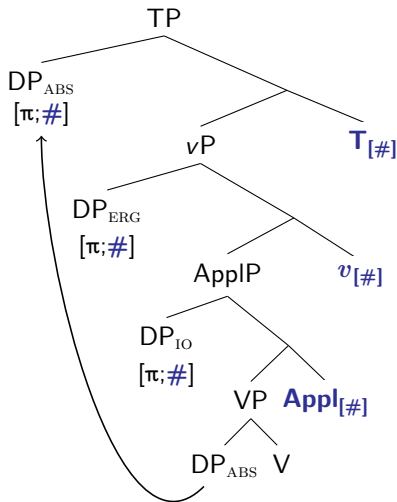
- ▶  $Appl^0$ ,  $v^0$  and  $T^0$  are merged deficient:  
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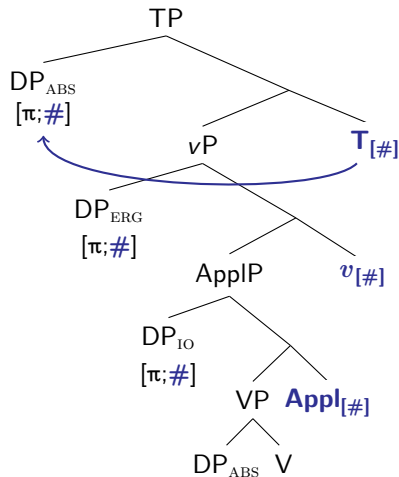
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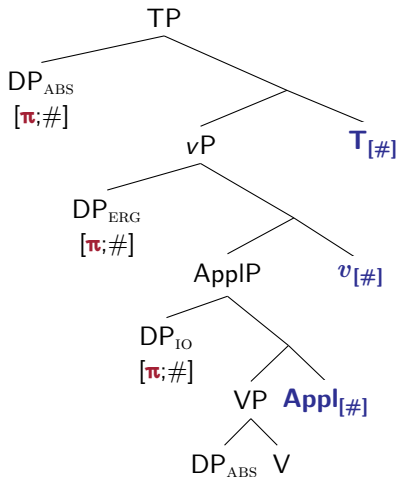
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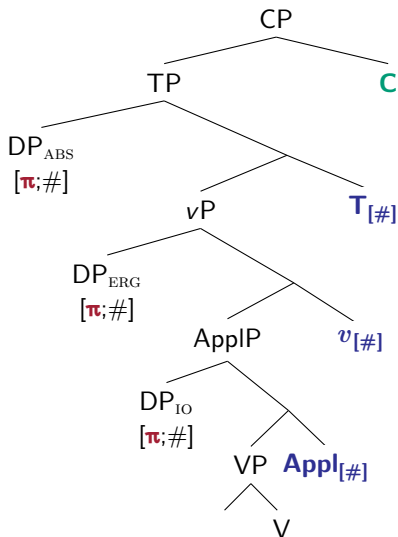


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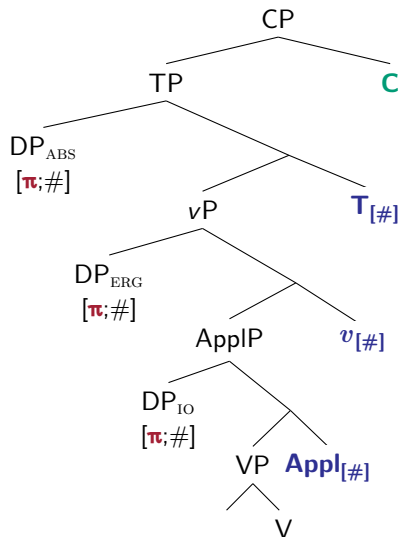
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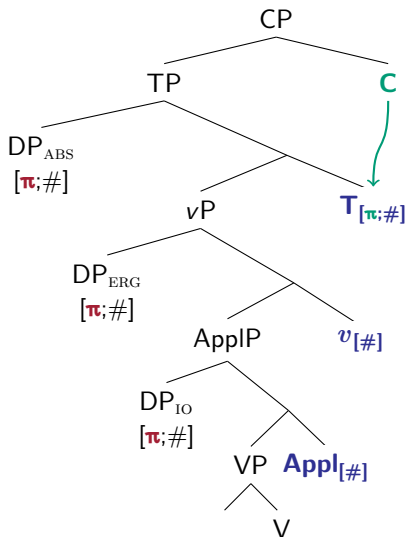
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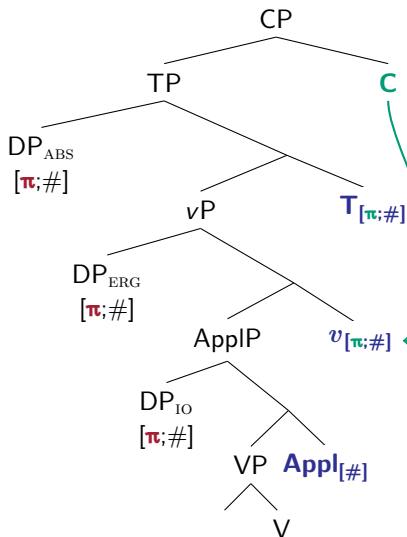
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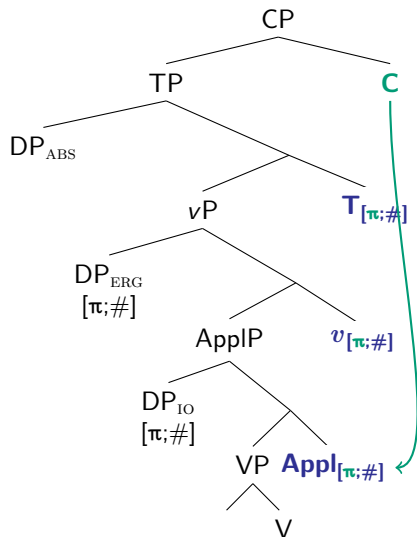
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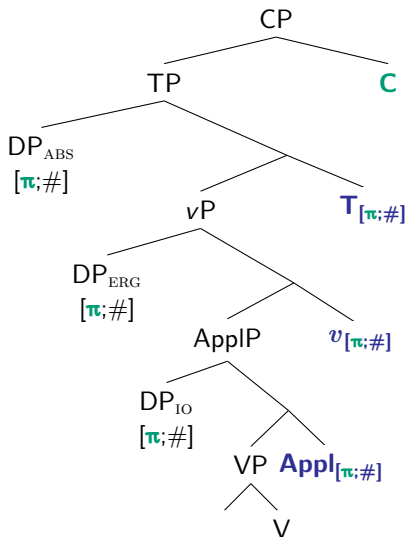
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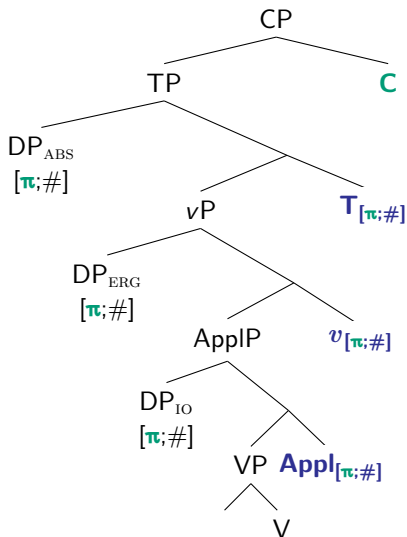
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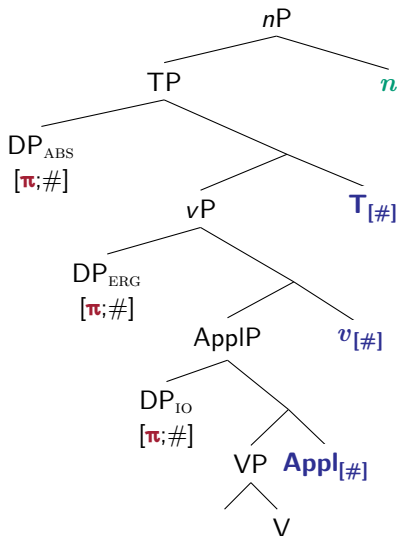


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- ▶ Probes are spelled out with fully specified  $\varphi$ -features.

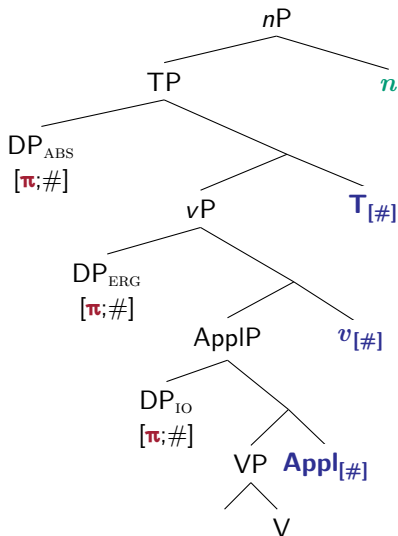


# Deficient $\varphi$ -agreement without $C^0$

TP is embedded under  $n^0$ :



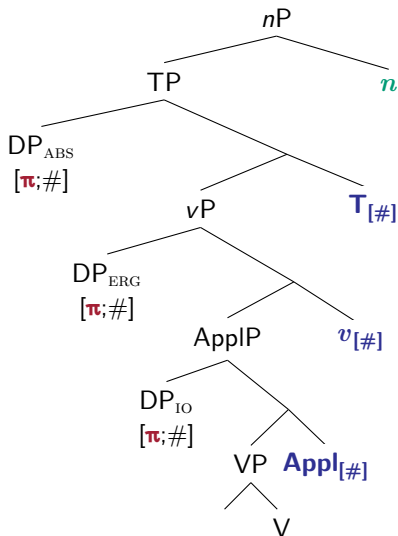
# Deficient $\varphi$ -agreement without $C^0$



**TP is embedded under  $n^0$ :**

► Verbal probes remain deficient.

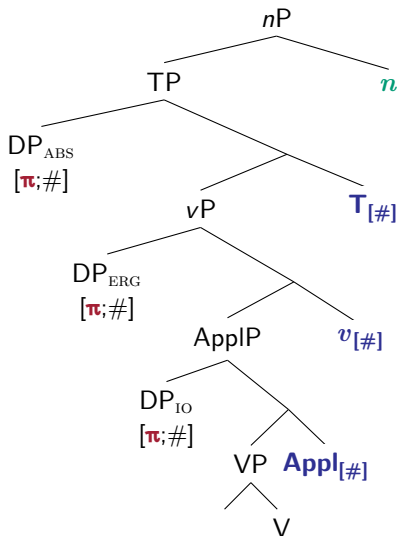
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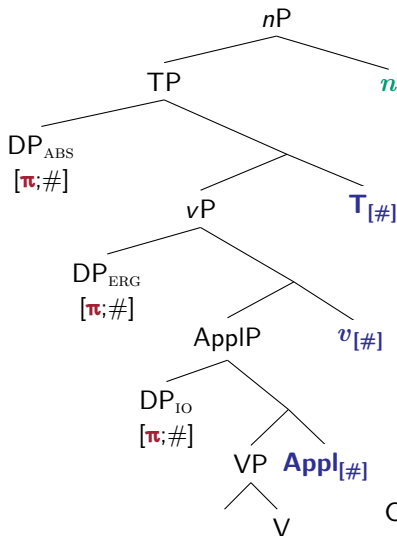
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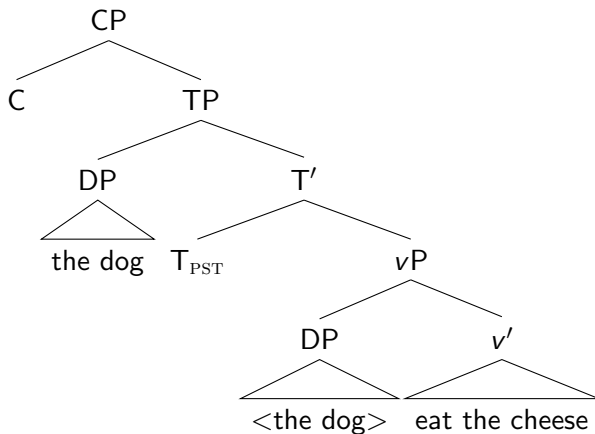
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Compare with C-to-T feature inheritance!

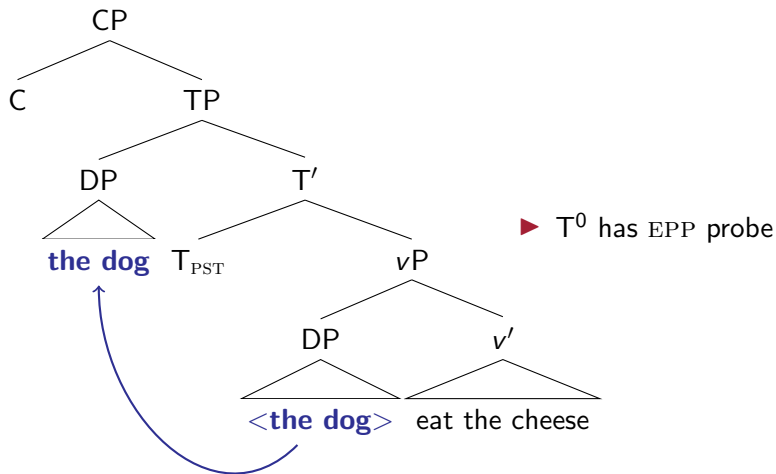
# Compare with feature inheritance: T licensed by C

Chomsky (2000, 2001) on English:



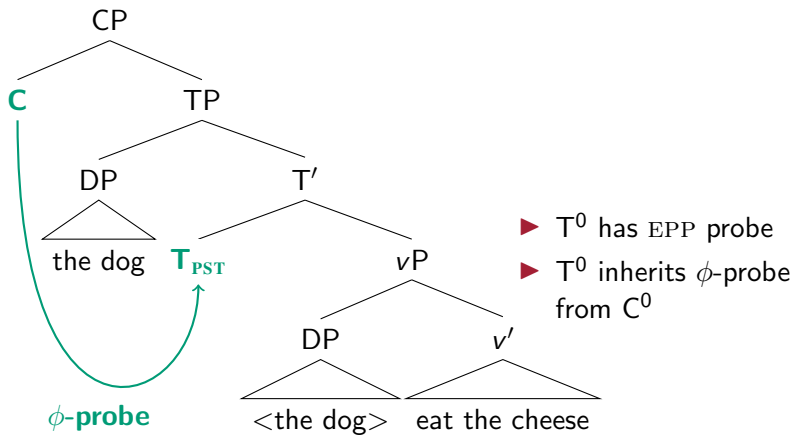
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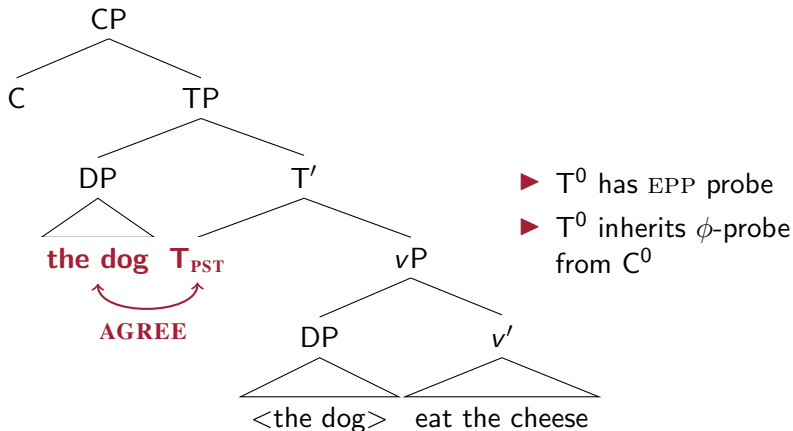
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# Compare with feature inheritance: T licensed by C

Chomsky (2000, 2001) on English:



$T^0$  is a defective EPP probe

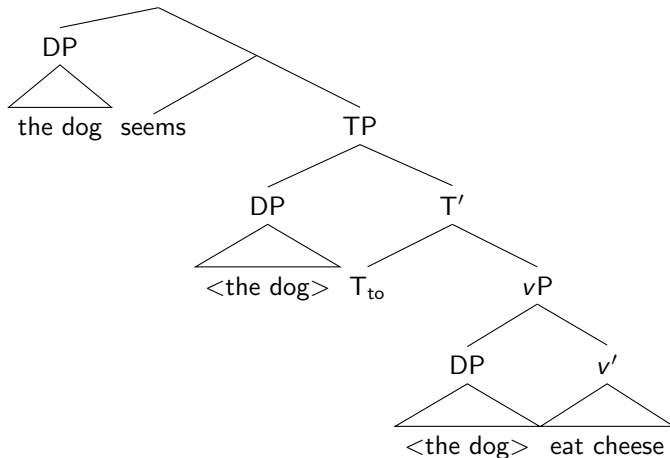
No  $C^0$

# $T^0$ is a defective EPP probe

No  $C^0 \Rightarrow$  infinitival  $T^0$  is a **defective probe**:

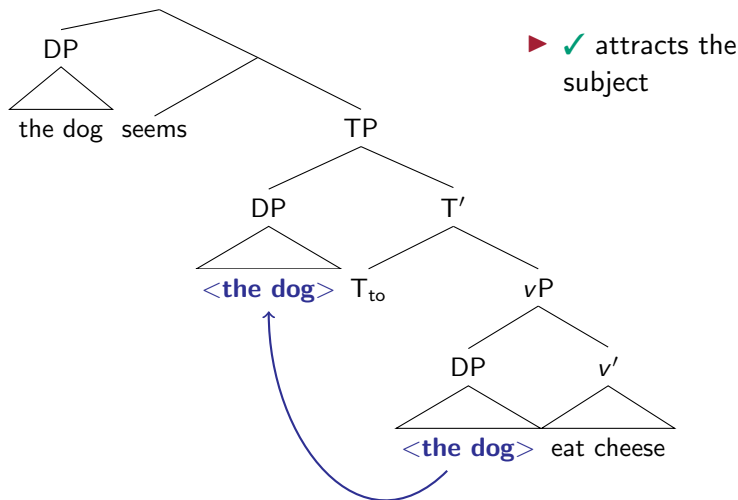
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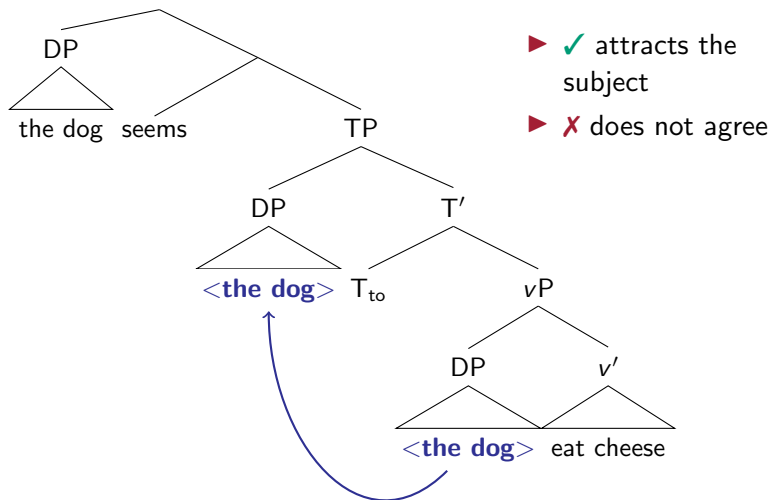
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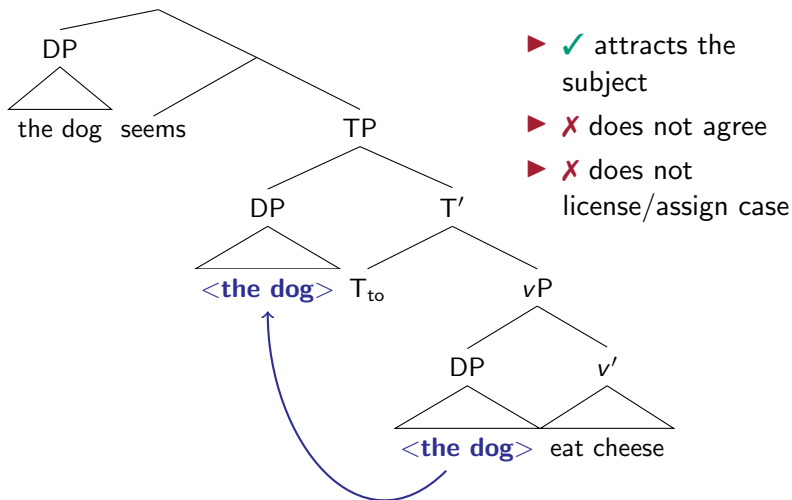
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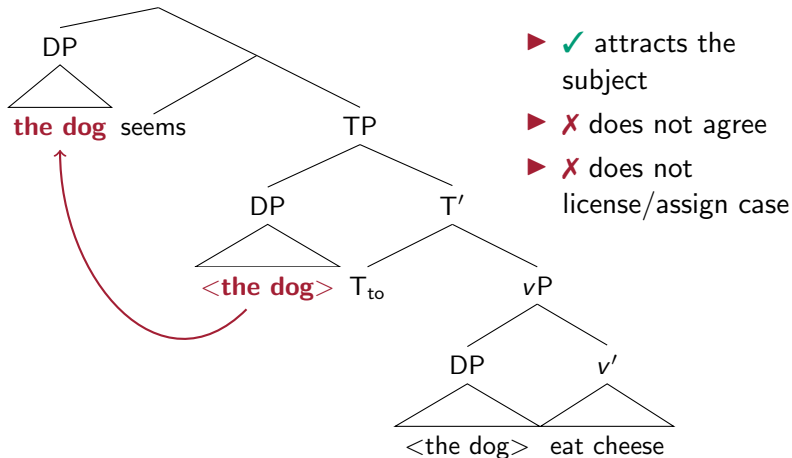
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**Prediction:**

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**Prediction:**  $\varphi$ -deficient nominals should be possible in nominalizations.

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3. structurally deficient NPs: not specified for  $\varphi$ -features



# Deficient agreement with anaphors

ja-            žene-    **ze-fe-**            dǎž'ǎ -n  
3PL.POSS- dress- **REC.IO-BEN-** sew    -NML

'their sewing of dresses for each other'

# Deficient agreement with anaphors

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‘their sewing of dresses for each other’

- ▶ Anaphor is specified only for [#].

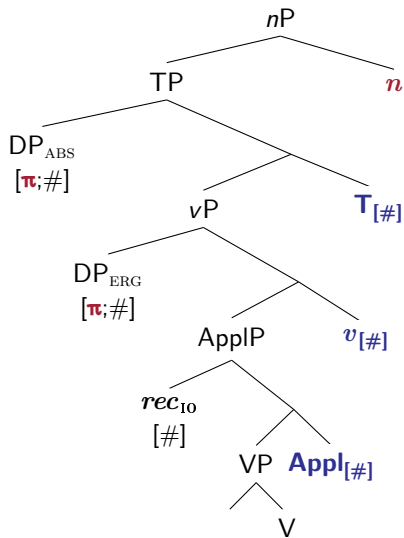
# Deficient agreement with anaphors

ja-            žene-    **ze-fe-**            dāž'ə -n  
3PL.POSS- dress- **REC.IO-BEN-** sew    -NML

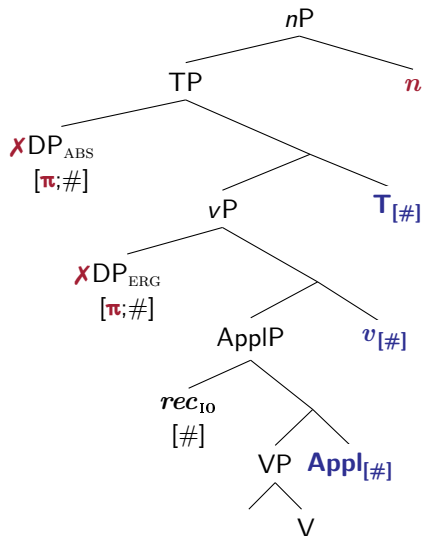
'their sewing of dresses for each other'

- ▶ Anaphor is specified only for [#].
- ▶ Deficient probe can license anaphor by checking [#] feature.

# $\varphi$ -deficient anaphors are licensed

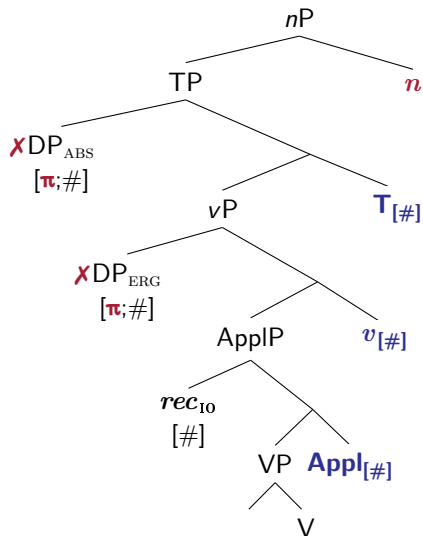


# $\varphi$ -deficient anaphors are licensed



- Deficient  $\varphi$ -probes cannot license full DPs.

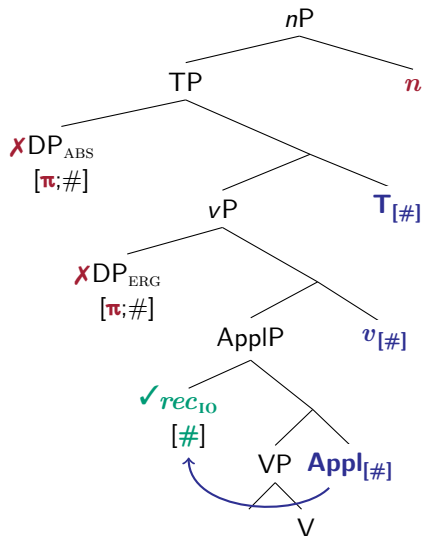
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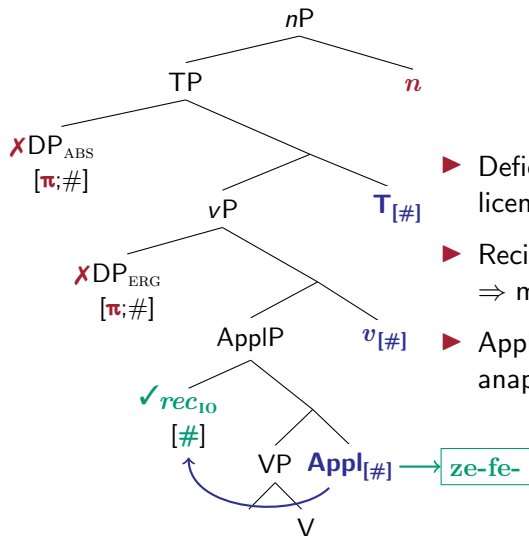
► Reciprocal only has  $[\#]$

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- ▶ Reciprocal only has  $[\#]$   
 $\Rightarrow$  may be licensed by  $Appl^0$ .
- ▶  $Appl^0$  expones  $\varphi$ -deficient anaphor agreement.



- ▶ PRO is unspecified for  $\varphi$ -features

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# Licensing PRO in nominalizations

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[ <b>PRO</b> <sub>PL</sub>	qə-	ze-	de-	š <sup>w</sup> e-nə-r ]	<i>pro</i> <sub>SG</sub>	səg <sup>w</sup> rjehə
	DIR-	REC-	COM-	dance-NML-ABS		I like

lit. 'I<sub>SG</sub> like [ **PRO**<sub>PL</sub> dancing with each other ].' (Ershova 2020:457)

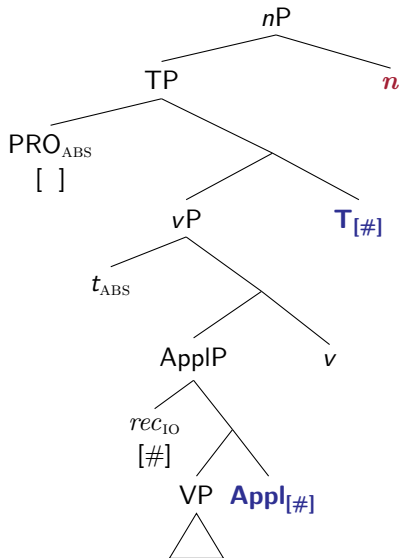
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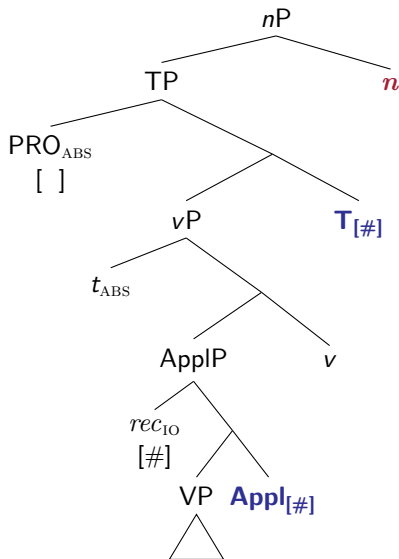
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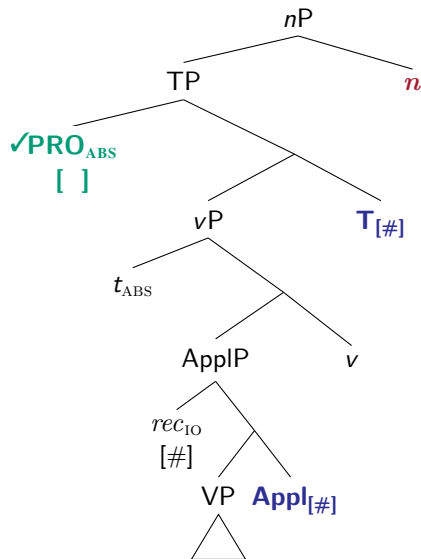


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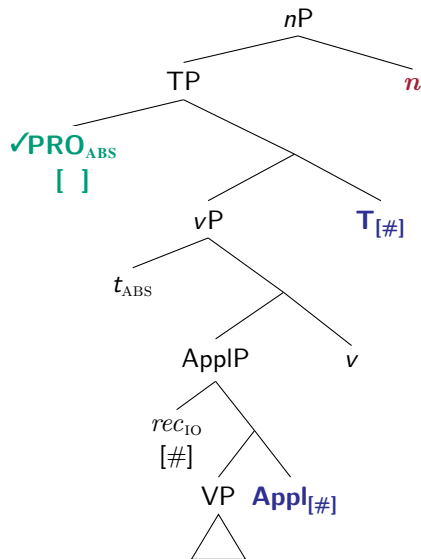
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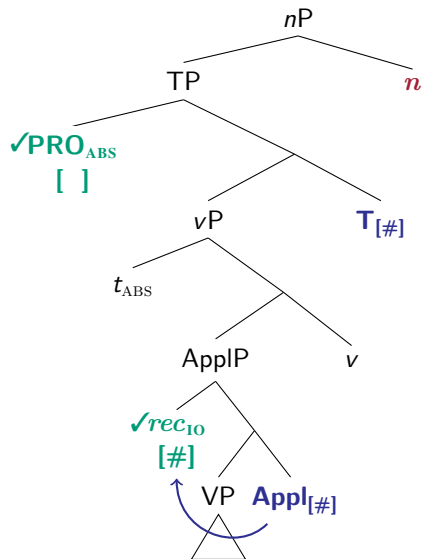


# $\varphi$ -deficient PRO is licensed



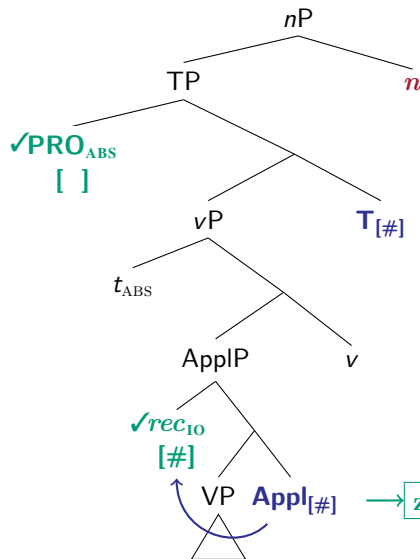
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 $\Rightarrow$  spelled out on  $Appl^0$

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3SG.POSS- **gift-**                      LOC- hope    -NML

'her anticipating of presents'



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- ▶ Structurally deficient NPs are not specified for number or person ~ generic interpretation
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- ▶ NPs are pseudo-incorporated  
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## NOMINAL LICENSING

- ▶ Background on West Circassian
- ▶ Functional structure of nominalizations
- ▶  $\varphi$ -probe licensing by  $C^0$
- ▶ Licensing arguments in nominalizations
- ▶ Conclusion

# Nominal licensing of arguments in nominalizations

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- ▶ Match Theory constraint (Selkirk 2011)
- ▶ Inspired by Compton and Pittman (2010); Barrie and Mathieu (2016)



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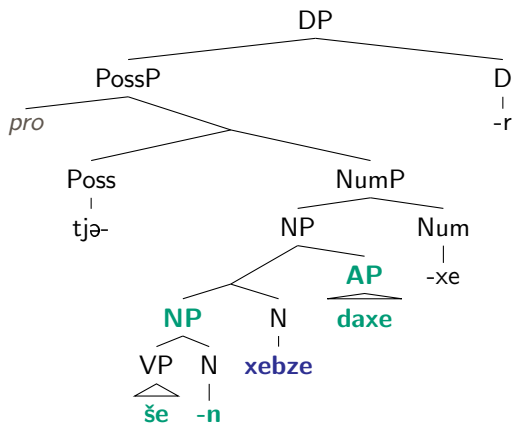
[ç<sup>w</sup>eqe- əč'jə- š'əʁən]- t<sup>w</sup>əč'an -xe -r  
[footwear- and- clothes]- shop -PL -ABS

'shops of shoes and clothes' (Lander 2017:93)

# DP phase is mapped to one phonological word

tjə-      [še -n]-    xebze -daxe      -xe -r  
1PL.POSS- lead -NML- rule    -beautiful -PL -ABS  
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An NP is licensed by adjacency if it is pronounced



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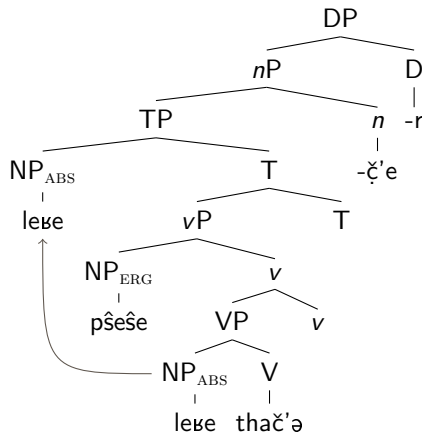
⇒ **NPs are pronounced in their theta-positions.**

# NPs are pronounced in their theta-positions

pșeșe- ✓leve- thač'ə-č'e-r  
girl- dish- wash-NML-ABS

'the girls' manner of dish-washing'

# NPs are pronounced in their theta-positions

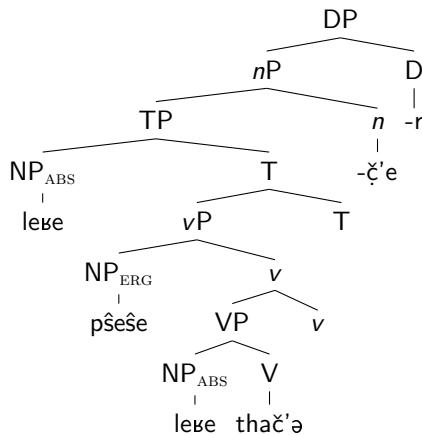


- NP<sub>ABS</sub> is selected by V<sup>0</sup> and moves to Spec,TP

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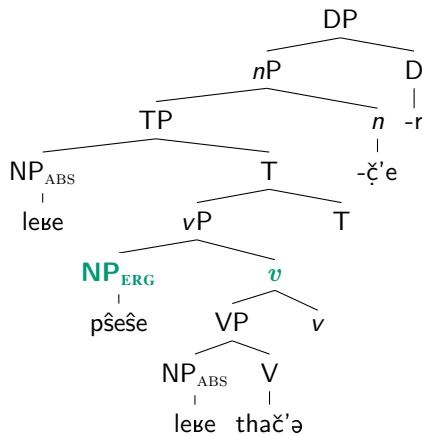
► NP<sub>ABS</sub> is selected by V<sup>0</sup> and moves to Spec,TP

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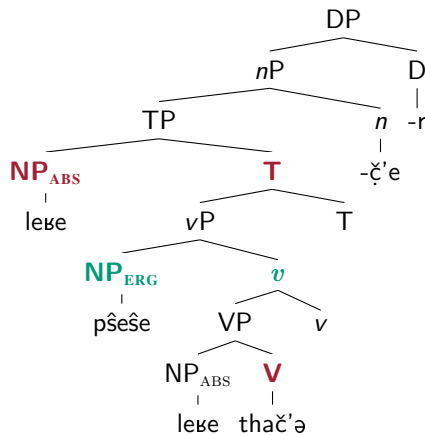
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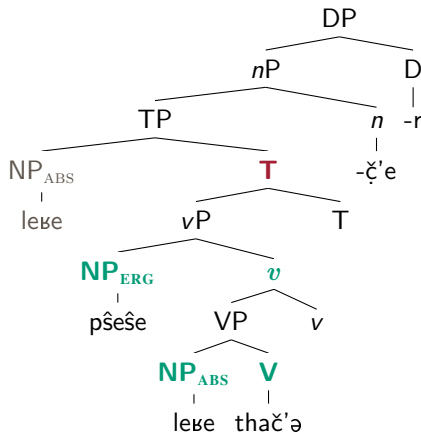


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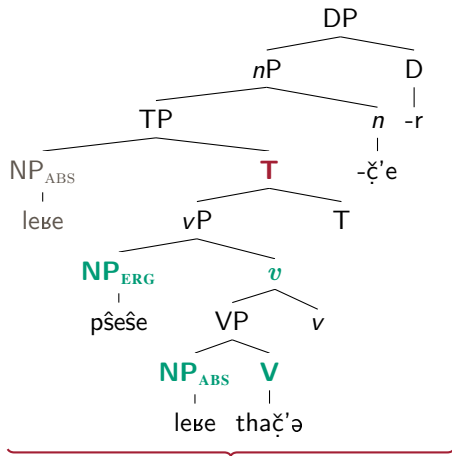


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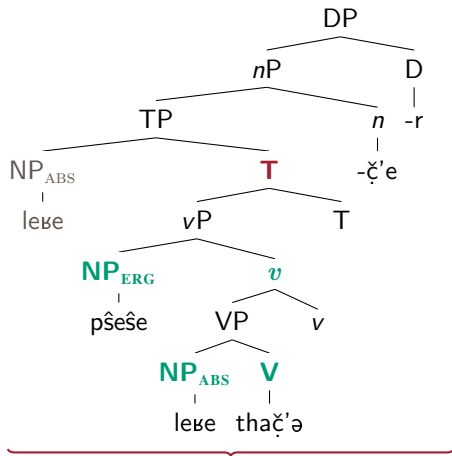


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 (\*dish-) girl- dish- wash-NML-ABS

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# Nominal licensing of arguments in nominalizations

In nominalizations:

- ▶ verbal  $\varphi$ -probes are deficient  $\Rightarrow$  cannot license full DPs
- ▶ arguments may be licensed **by the nominal syntax**
  - ▶ bare NPs — by adjacency  
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  - ▶ one full DP — as possessor = by nominal  $\varphi$ -probe  $\text{Poss}^0$

pșășe-m    jə-            heč'e- je-    že    -n  
girl-OBL    3SG.POSS- guest-    DAT- wait -NML

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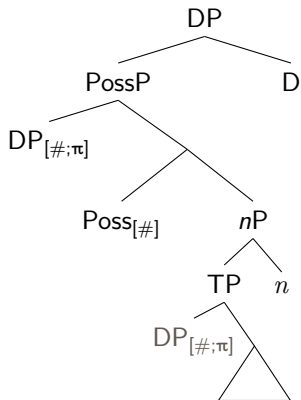
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pšaše-m      jə-      heč'e- je-      že      -n  
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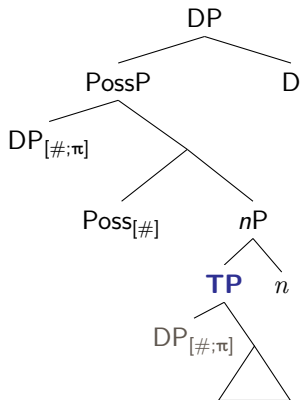
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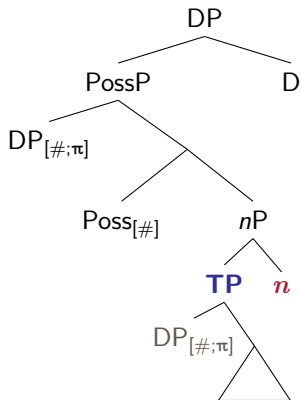
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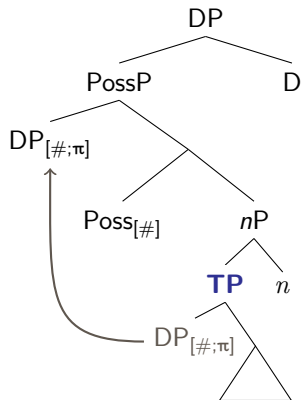
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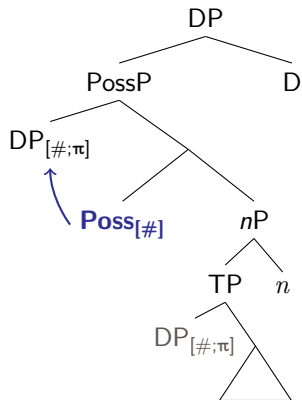
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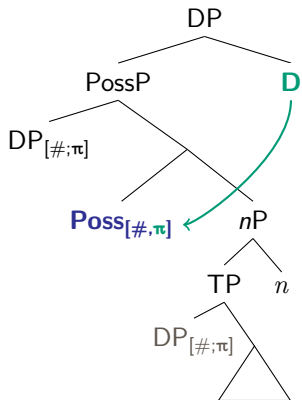


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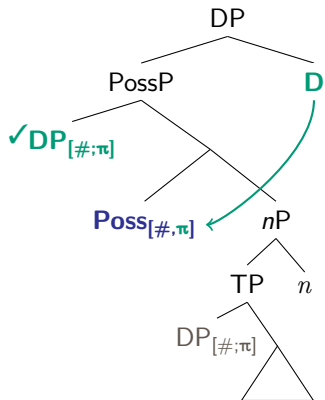
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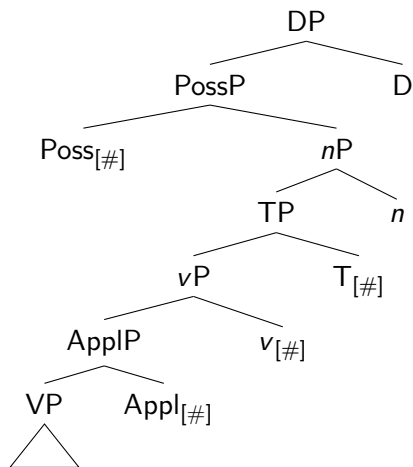
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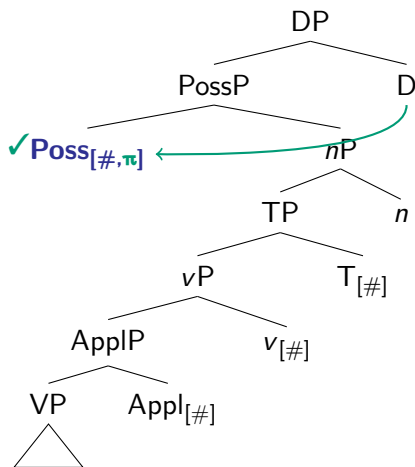
**In nominalizations:**  $D^0$  licenses  $\varphi$ -probe on  $\text{Poss}^0$

**Question:** Why can't  $D^0$  license  $\varphi$ -probes on  $T^0$ ,  $v^0$  and  $\text{Appl}^0$ ?

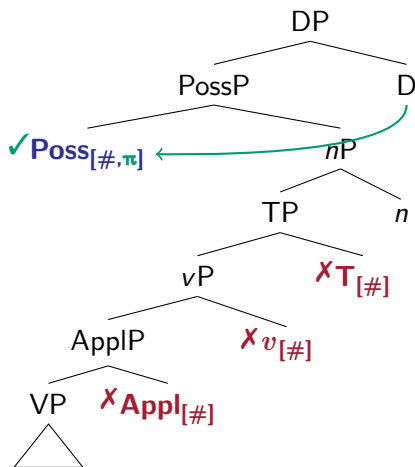
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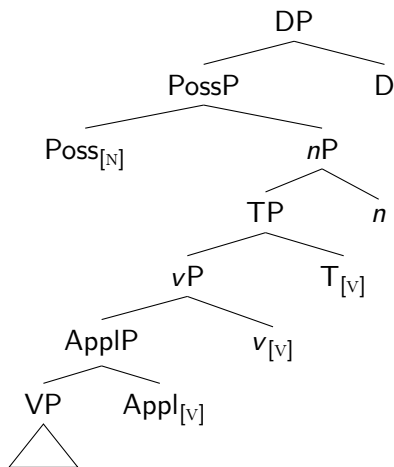
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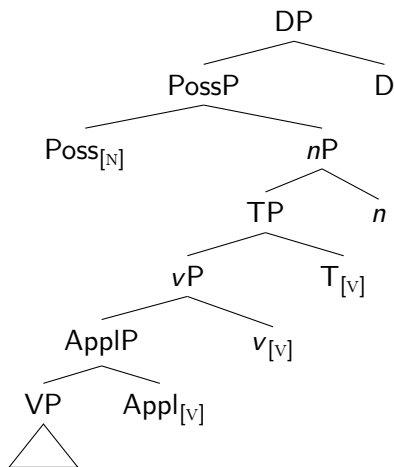


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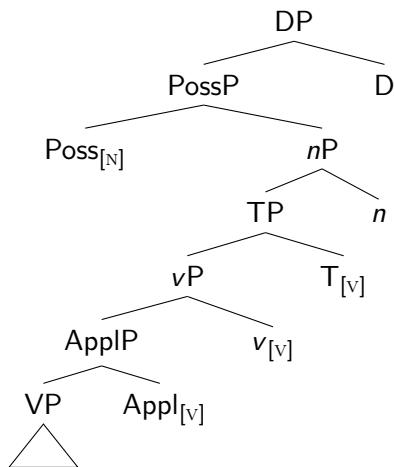
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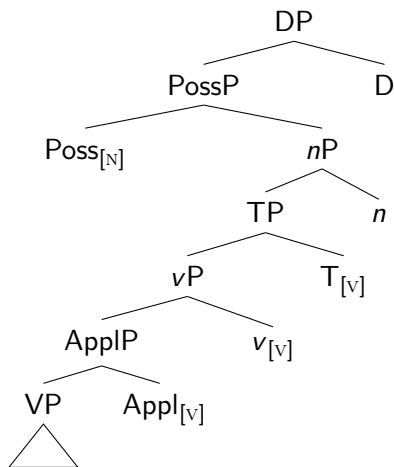
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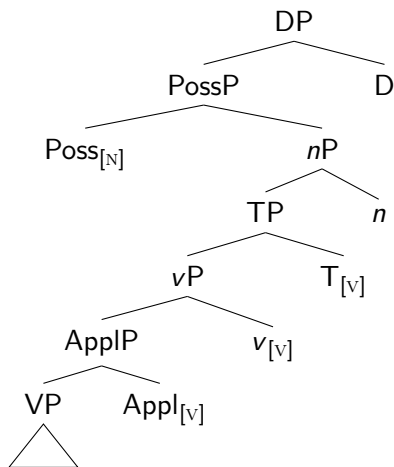


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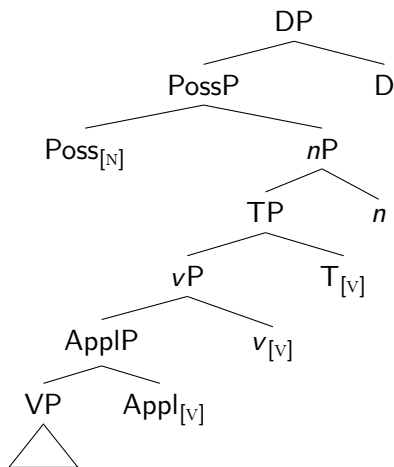


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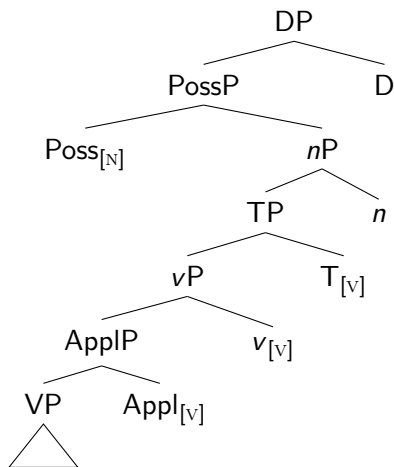
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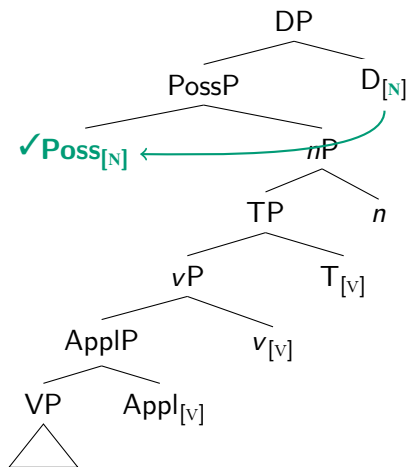
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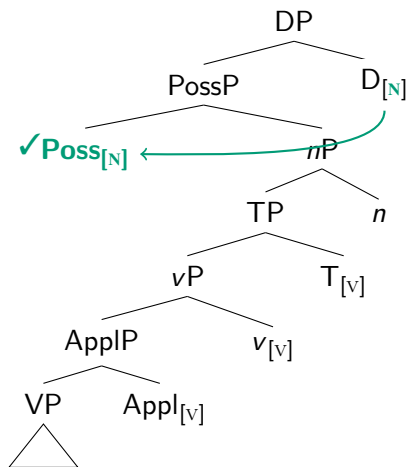
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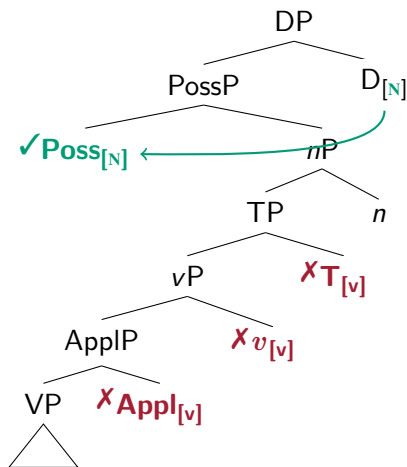
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- ▶ Background on West Circassian
- ▶ Functional structure of nominalizations
- ▶  $\varphi$ -probe licensing by  $C^0$
- ▶ Licensing arguments in nominalizations
- ▶ Conclusion

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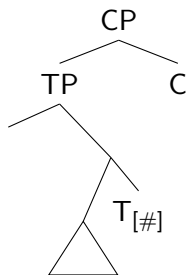
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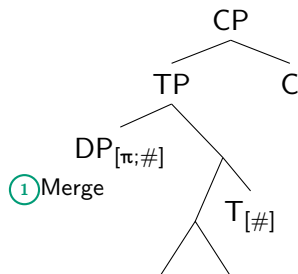
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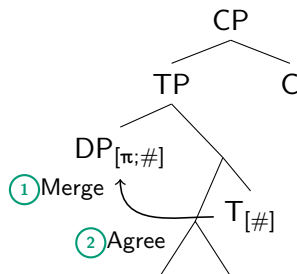
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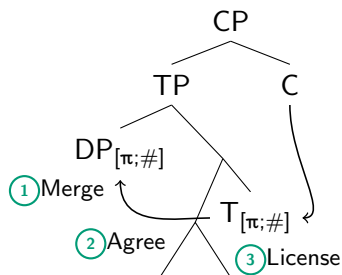
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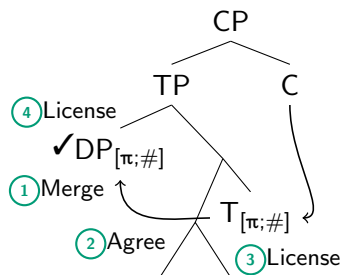
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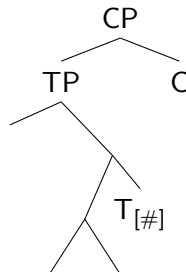
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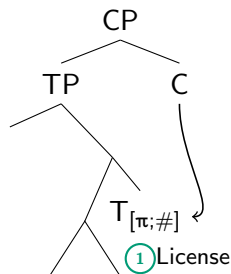
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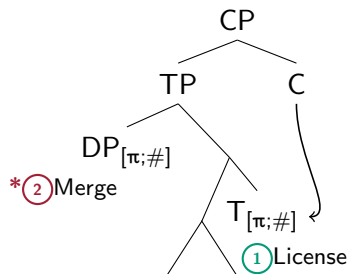
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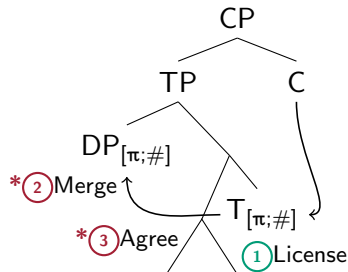
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# Thank you!

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- ▶ reflexives are local subject oriented (Ershova 2019, to appear b)  
⇒ bound by highest DP in  $vP$
- ▶ reflexive agreement is possible in nominalizations

# Reflexive agreement with absolutive

mə pšašem zə- q- jə- ɸe- š<sup>w</sup>e -ž'ə -ɸ  
this girl(ERG) **REFL.ABS-** **DIR-** 3SG.ERG- CAUS- dance -RE -PST

'This girl made herself dance.'

**FINITE**

jə- zə- qə- ɸe- š<sup>w</sup>a -č'e  
3SG.POSS- **REFL.ABS-** **DIR-** CAUS- dance -NML

'her manner of making herself dance'

**NOMINALIZATION**