

# What's in a (polysynthetic) phase

Dynamic domains, spellout and locality

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[bit.ly/KEMorphSyn2024](https://bit.ly/KEMorphSyn2024)

# Locality domains: the broad consensus

- ▶ Agreement and movement are constrained by **locality domains** = **phases**
- ▶ Movement must be **successive-cyclic** through the **edge** of the phase to “escape” an opaque locality domain.

(Chomsky 2000, 2001, 2008; Abels 2003, 2012; Rackowski and Richards 2005; Müller 2010, 2011; Bošković 2014, 2015, 2016, among many others)

# Movement must be successive-cyclic

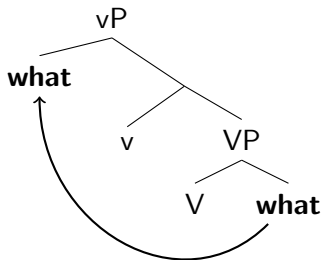
*What do you think that John bought?*

**What** do you ~~what~~ think ~~what~~ that John ~~what~~ bought ~~what~~?

# Movement must be successive-cyclic

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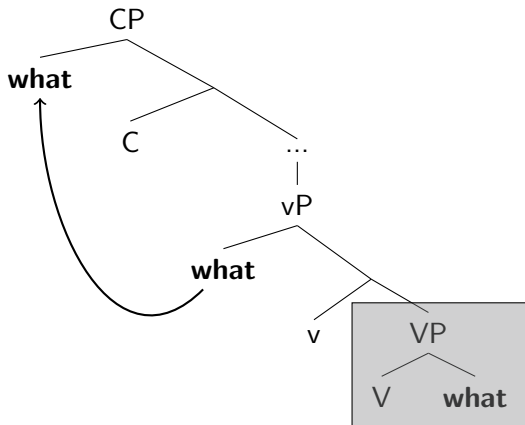
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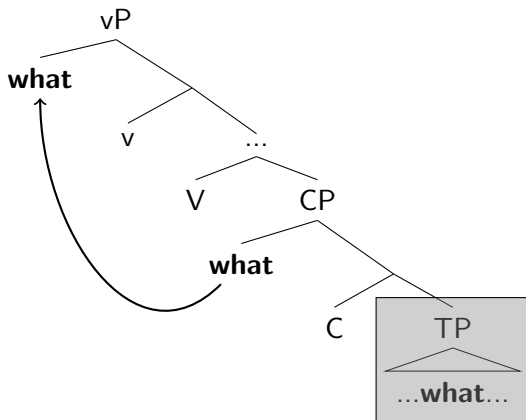
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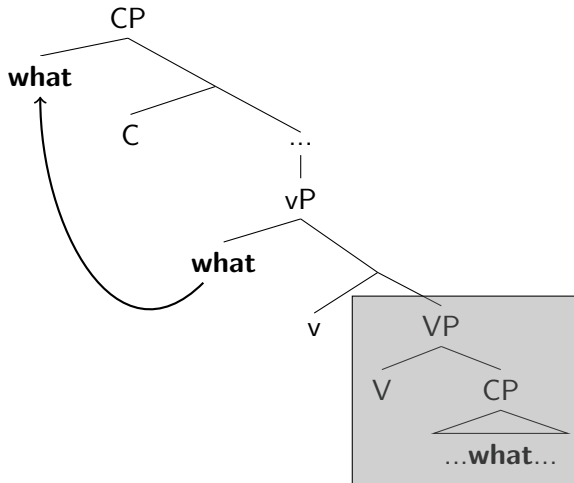
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# Movement must be successive-cyclic

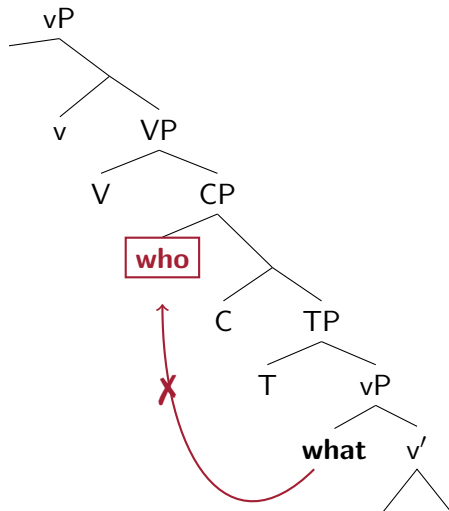
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# Movement must be successive-cyclic

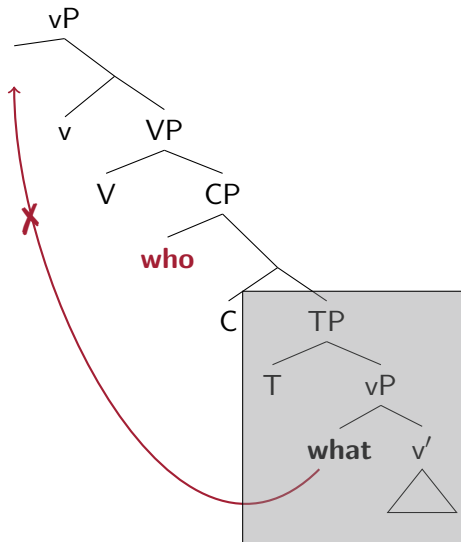
\***What** do you know [<sub>CP</sub> **who** brought **what** ]?





# Movement must be successive-cyclic

\***What** do you know [<sub>CP</sub> **who** brought **what** ]?



# Why are phases opaque for movement?

Broadly speaking, **two types of theories**:

## 1. Phases are **spellout domains**

⇒ movement limited by interface conditions

- ▶ transfer to PF → opacity for syntactic operations

(e.g. Uriagereka 1999, 2012; Chomsky 2001, 2008)

- ▶ phases are linearized at spellout

→ movement constrained by linear order

(Fox and Pesetsky 2005)

## 2. Phases are **interveners for Agree**

(Abels 2003; Rackowski and Richards 2005; van Urk and Richards 2015; Halpert 2019)

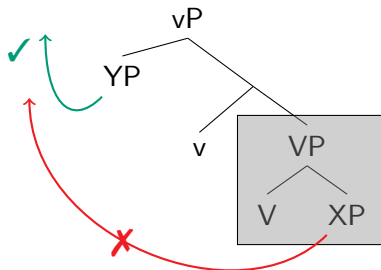
# Approach 1: Spellout domains are opaque

Chomsky (2000) *et seq.*:

Phases are **barriers for movement**

because their complements are **spelled out**.

Transfer to PF  $\Rightarrow$  syntactic opacity

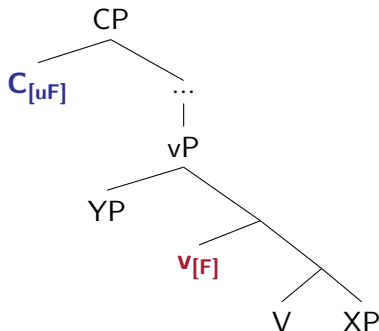


## Approach 2: Defective interveners are opaque

Abels (2003); Rackowski and Richards (2005) *et seq.*:

Phases **intervene** between Probes and Goals

because of their **features**.

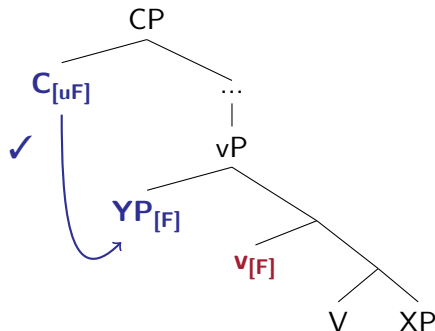


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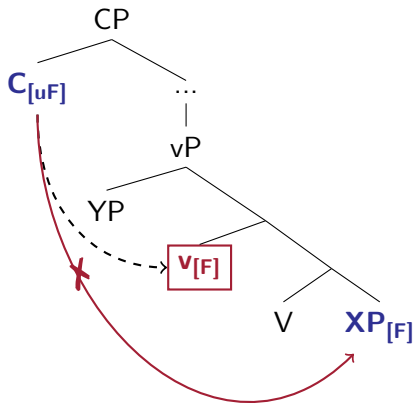


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Phases **intervene** between Probes and Goals

because of their **features**.



# Syntactic domains and interface domains: the proposal

## Two types of domains

### 1. Locality domains

- ▶ opaque for subextraction by intervention
- ▶ elements can 'escape' through the edge

### 2. Interface domains

- ▶ targeted for syntax-PF spellout rules
- ▶ spelled out wholesale, including the edge

The two types of domains overlap, **but only partially!**

**Case study:** West Circassian

- ▶ Locality domains: (at least) **DP**, **CP**, vP, ApplP
- ▶ Spellout domains: DP and CP

# Evidence from dynamic domains

Syntactic locality domains are dynamic

Syntactic locality domains can be **voided by agreement**

← Principle of Minimal Compliance (Richards 1998)

*Example:  $C$  agrees with  $vP \Rightarrow C$  can probe into  $vP$*

**In West Circassian:**

Further embedding makes extraction **more accessible!**

$\Rightarrow$  Locality domains are not opaque due to PF transfer.



# Locality domains $\neq$ spellout domains

- ▶ Syntactic opaqueness  $\nleftrightarrow$  transfer to PF
- ▶ Locality domains  $\neq$  prosodic domains

## In West Circassian:

syntax-to-PF mapping rules are defined over DP and CP,  
**but not vP and ApplP!**

# The view from polysynthesis

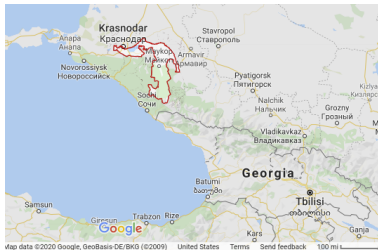
Dynamic phasehood in West Circassian is connected to **polysynthesis** ( $\sim$  rules of complex word formation):

- ▶ **polypersonal  $\varphi$ -probes** are **licensed by Agree** with  $C^0$   
Agree with  $C^0$  **can render phases transparent for probing**
- ▶ **syntax-to-prosody rules** map **phrasal constituents to phonological words**  
these constituents are identifiable as **spellout domains**

- ▶ **Background on West Circassian**
- ▶ Phases in the syntax: interveners for Agree
- ▶ Phases at the interface: spelling out polysynthesis
- ▶ Wrapping up: phases in polysynthesis

## West Circassian (or Adyghe):

- ▶ Northwest Caucasian
- ▶ Republic of Adyghea, Russia
- ▶ agglutinating, polysynthetic
- ▶ ergative case and agreement



## Data:

- ▶ fieldwork on the **Temirgoy dialect** in the Shovgenovsky district of Adyghea
- ▶ **Adyghe Corpus** by Timofey Arkhangelskiy, Irina Bagirokova, Yuri Lander, and Anna Lander (<http://adyghe.web-corpora.net/>)

# West Circassian is polysynthetic

Agglutinating prefixal and suffixal morphology:

*wəqəzerešhapərazɸewəḵ<sup>w</sup>əreječ'əž'əš<sup>w</sup>əɸaɸer*

wə-	qə-	zere-	šha-	pə-	rə-	z-	ɸe-
2SG.ABS-	DIR-	FACT-	head-	LOC-	TRANS-	1SG.ERG-	CAUS-
wəḵ <sup>w</sup> ereje-	č'ə	-ž'ə	-š <sup>w</sup> ə	-ɸa	-ɸe	-r	
fall		-go.out	-RE	-POT	-PST	-PST	-ABS

‘that I was able to make you turn a somersault’

(Lander and Testelefs 2017:952)

# West Circassian is polysynthetic

Head marking and pro-drop:

*səqəpfarjəβeləβ<sup>w</sup>əβ*

me	for your sake	to them	he	
↓	↓	↓	↓	
sə-	qə- p-f-	a-r-	jə-	βe-
1SG.ABS-	DIR- 2SG.IO+BEN-	3PL.IO+DAT-	3SG.ERG-	CAUS-
λeβ <sup>w</sup> ə	-β			
see	-PST			

‘He showed me to them for your sake.’

(Korotkova and Lander 2010:301)

Order of cross-reference markers:

**ABS-**      **(IO+APPL-)\***      **ERG-**

# Complex nominal morphology

- ▶ complements and modifiers incorporated
- ▶ include a mix of lexical and functional morphology

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

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

[abʒexe]- šəw -jə- š'  
Abzakh- horseman -LNK- three

'three Abzakh horsemen' (Lander 2017:83)

# Head marking on nominals

s-                    šəpχ<sup>w</sup>əxer  
**1SG.POSS-** sister.PL.ABS

‘my sisters’

**INALIENABLE**

t-                    jə-            ɸ<sup>w</sup>əneɸ<sup>w</sup>əxem  
**1PL.POSS- ALIEN-** neighbor.PL.OBL

‘our neighbors’

**ALIENABLE**



# Case marking

## -r (ABS):

- ▶ intransitive subject
- ▶ direct object

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

‘This girl dances well.’

## -m (OBL):

- ▶ transitive subject
- ▶ applied object
- + complements of P
- + possessors

**A**                      **O**  
sabəjxe-**m**      haxe-**r**      qaləw<sup>w</sup>əw  
children-**OBL**      dogs-**ABS**      saw

‘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.’

# Case marking on possessors

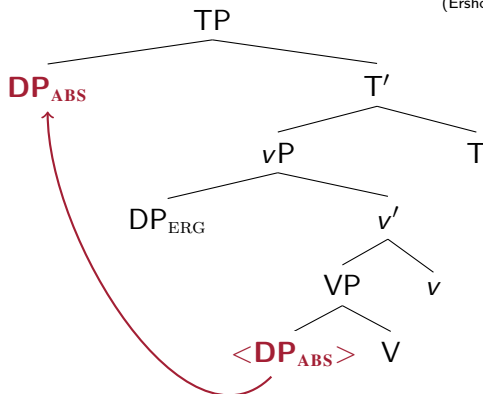
p̂sâse-**m**    Ø-jə-p̂sêseɁ<sup>w</sup>  
girl-**OBL**    3SG.POSS-ALIEN-female.friend

'the girl's friend'

# High absolutive

- ▶  $DP_{ABS}$  moves to Spec,TP
- ▶  $DP_{ERG}$  (and  $DP_{IO}$ ) remain in situ
- ▶ evidence from parasitic gaps and reciprocal binding

(Ershova 2019, 2021, 2023b)



(Bittner and Hale 1996; Manning 1996; Baker 1997; Aldridge 2008; Yuan 2018, 2022; Coon et al. 2021; Royer 2023, a.o.)

## West Circassian:

- ▶ polysynthetic: head marking and complex morphology
- ▶ ergative case marking and agreement
- ▶ high absolutive syntax

- ▶ Background on West Circassian
- ▶ **Phases in the syntax: interveners for Agree**
- ▶ Phases at the interface: spelling out polysynthesis
- ▶ Wrapping up: phases in polysynthesis

# Phases in the syntax: locality domains

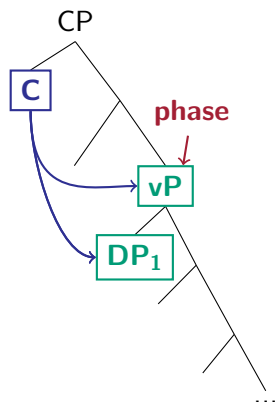
Inventory of locality domains (=syntactic phases):  
**vP**, **AppIP**, **CP**, and **DP**

## Properties of syntactic phases:

- ▶ Only the phase edge can move.  
Subextraction is impossible:
  - ▶ from the phase edge
  - ▶ from the phase complement
- ▶ Phase heads can trigger successive-cyclic movement to phase edge.
- ▶ **Phases can be ‘unlocked’ by Agree.**  
⇒ Phase opaqueness is not due to PF transfer.

**West Circassian:** Successive-cyclic movement is possible when clausebound movement isn't!

# Agree-based theory of locality domains



- ▶ Movement is triggered by Agree between a **probe** and the closest **goal**
- ▶ All **phases\*** are potential **goals**
- ▶ DP<sub>1</sub> and vP are both **closest goals**

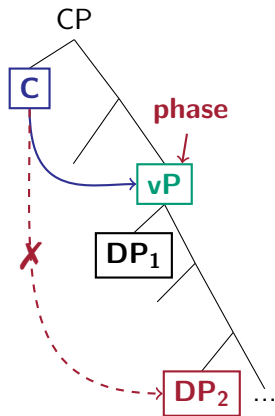
because there is no XP  
which c-commands or dominates DP<sub>1</sub>,  
but does not c-command or dominate vP

vP and Spec,vP are equidistant  
= both accessible to the probe

\*dominating a matching feature

(Pesetsky and Torrego 2001; Rackowski and Richards 2005; van Urk and Richards 2015;  
Halpert 2019; Ershova to appear)

# Phases as interveners



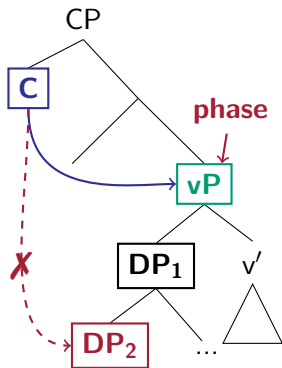
- ▶ Movement is triggered by Agree between a **probe** and the closest **goal**
- ▶ All **phases** are potential **goals**
- ▶ DP<sub>2</sub> is cannot move — vP is **closer**:  
DP<sub>1</sub> c-commands DP<sub>2</sub>,  
but does not c-command vP

Only vP and Spec,vP are accessible  
to the probe  
= vP is opaque for subextraction

(Pesetsky and Torrego 2001; Rackowski and Richards 2005; van Urk and Richards 2015;  
Halpert 2019; Ershova to appear)



# Phase edges are opaque for subextraction



- ▶ Movement is triggered by Agree between a **probe** and the closest **goal**
- ▶ All **phases** are potential **goals**
- ▶ DP<sub>2</sub> is cannot move — vP is **closer**: DP<sub>1</sub> dominates DP<sub>2</sub>, but does not dominate vP

Phase edge can move,  
but is opaque for subextraction.

(Ershova to appear; see also Chomsky 2000, 2001)

**Next:** Phasehood effects in West Circassian relativization.

# Structure of relative clauses

(Caponigro and Polinsky 2011; Lander 2012; Ershova 2021, 2023b)

### Finite clause:

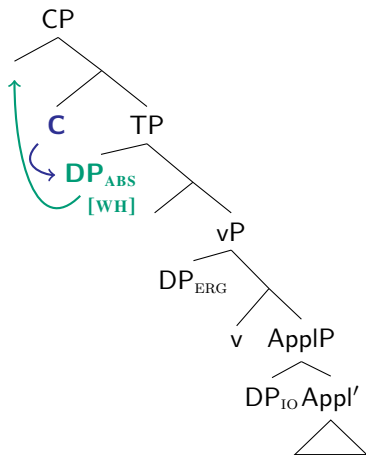
a-š'                      txəɫə-r                      [ mə ɕəfə-m                      ]  
that-ERG                      book-ABS                      this person-OBL  
Ø-    Ø-                      r-    jə-                      tə-ʁ  
3ABS- 3SG.IO-                      DAT- 3SG.ERG- give-PST

'S/he gave a book to this person.'

### Relative clause:

'the person to whom s/he gave the book' (Lander 2012:276)

# Any argument can be relativized

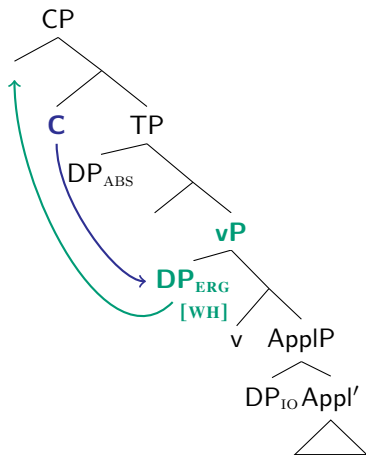


✓ **ABS**

no phase boundary between C  
and Spec,TP

⇒ ABS can move

# Any argument can be relativized



## ✓ ABS

no phase boundary between C  
and Spec,TP

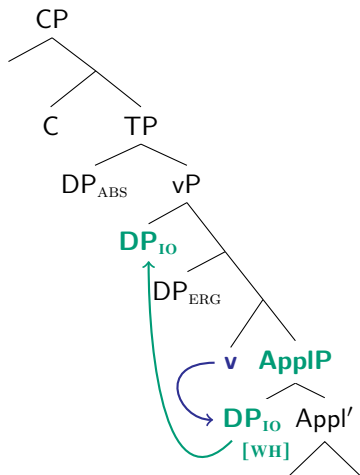
⇒ ABS can move

## ✓ ERG

Spec,vP is equidistant with vP  
phase

⇒ ERG can move

# Any argument can be relativized



## ✓ ABS

no phase boundary between C and Spec,TP

⇒ ABS can move

## ✓ ERG

Spec,vP is equidistant with vP phase

⇒ ERG can move

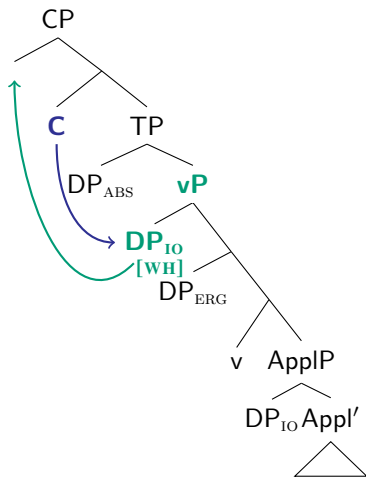
## ✓ IO

AppIP is a phase (McGinnis 2000, 2001)

Spec,AppIP is equidistant with AppIP

⇒ IO can move to Spec,vP

# Any argument can be relativized



## ✓ ABS

no phase boundary between C and Spec,TP

⇒ ABS can move

## ✓ ERG

Spec,vP is equidistant with vP phase

⇒ ERG can move

## ✓ IO

ApplP is a phase (McGinnis 2000, 2001)

Spec,ApplP is equidistant with ApplP

⇒ IO can move to Spec,vP  
→ Spec,CP

# Any argument can be relativized

χərbəzew [ \_\_<sub>ABS</sub> a-š' Ø- ə- bzə-βe-r ]  
watermelon that-ERG WH.ABS- 3SG.ERG- cut-PST-ABS

'the watermelon that he cut'

✓ABS REL

[ txələ-r \_\_<sub>IO</sub> Ø- ze- r- jə- tə-βe ] çəfə-r  
book-ABS 3ABS- WH.IO- DAT- 3SG.ERG- give-PST person-ABS

'the person to whom s/he gave the book'

✓IO REL

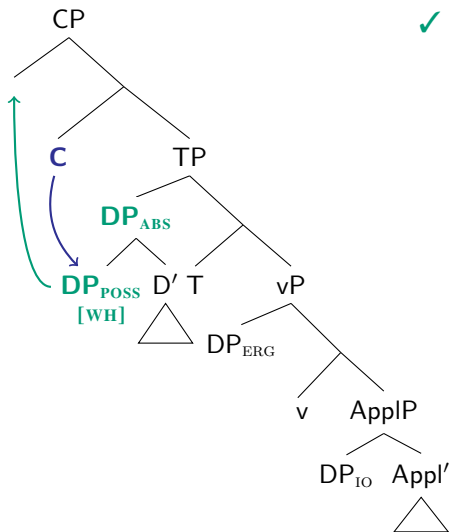
č'alew [ apč'ə-r \_\_<sub>ERG</sub> Ø- zə- q<sup>w</sup>əta-βe-m ]  
boy glass-ABS 3ABS- WH.ERG- break-PST-OBL

'the boy that broke the glass'

✓ERG REL

(Lander 2012:274-276)

# Phase edges are opaque: possessor extraction



✓ **possessor of ABS**

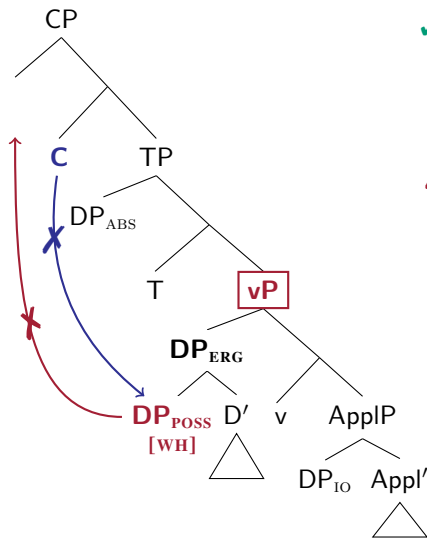
No phase between C and TP

⇒ ABS and POSS are equidistant

⇒ POSS<sub>ABS</sub> can move



# Phase edges are opaque: possessor extraction



## ✓ possessor of ABS

No phase between C and TP

⇒ ABS and POSS are equidistant

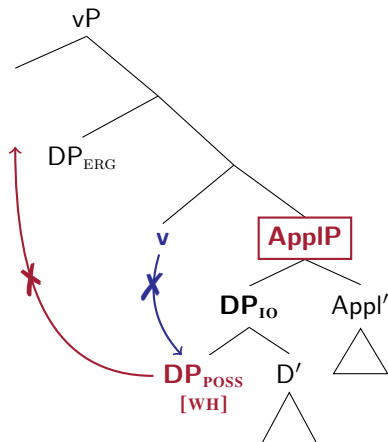
⇒ POSS<sub>ABS</sub> can move

## ✗ possessor of ERG

vP is closer to C than POSS

⇒ POSS<sub>ERG</sub> cannot move

# Phase edges are opaque: possessor extraction



## ✓ possessor of ABS

No phase between C and TP

$\Rightarrow$  ABS and POSS are equidistant

$\Rightarrow$   $POSS_{ABS}$  can move

## ✗ possessor of ERG

$vP$  is closer to C than POSS

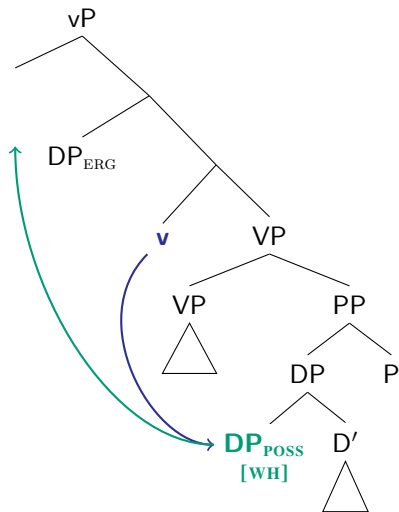
$\Rightarrow$   $POSS_{ERG}$  cannot move

## ✗ possessor of IO

$ApplP$  is closer to  $v$  than POSS

$\Rightarrow$   $POSS_{IO}$  cannot move

# Phase edges are opaque: possessor extraction



## ✓ possessor of ABS

No phase between C and TP

⇒ ABS and POSS are equidistant

⇒ POSS<sub>ABS</sub> can move

## ✗ possessor of ERG

vP is closer to C than POSS

⇒ POSS<sub>ERG</sub> cannot move

## ✗ possessor of IO

AppIP is closer to v than POSS

⇒ POSS<sub>IO</sub> cannot move

## ✓ possessor of PP complement!

PP is not at a phase edge

⇒ v can agree with POSS<sub>PP</sub>

# ABS external argument is transparent for subextraction

ŝ<sup>w</sup>əzew<sub>i</sub> [ *t<sub>i</sub>* **z-** jəpŝaŝe ](**ABS**) daxew **Ø-** qaŝ<sup>w</sup>erer  
woman **WH.POSS-** girl well **3ABS-** dance.DYN.ABS

‘the woman whose daughter dances well’

# ABS internal argument is transparent for subextraction

ŝ<sup>w</sup>əzew<sub>i</sub>      [ *t<sub>i</sub>*      zə-      q<sup>w</sup>e ](ABS)      hapsem  
woman                      WH.POSS- son      prison.OBL  
Ø-      Ø-ç-a-zaŋe-r  
3ABS- 3IO.SG-LOC-3PL.ERG-throw.PST.ABS

‘the woman whose son they threw in jail’



# Multiple wh-agreement as a pseudocleft



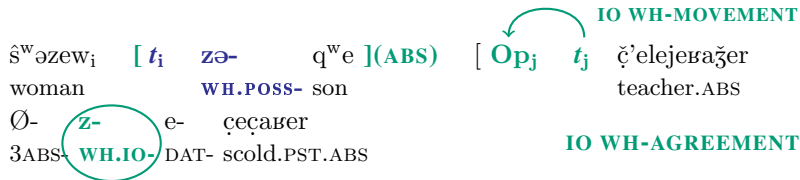
**Evidence:** case connectivity effects (Ershova 2021, to appear)



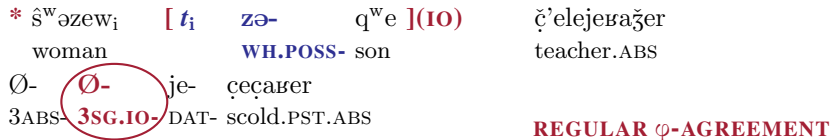


# Possessor of IO cannot be extracted

## PSEUDOCLEFT REPAIR:



## DIRECT RELATIVIZATION:



‘the woman whose son the teacher scolded’

Possessor of PP complement can be extracted!

Op<sub>i</sub> [ <sub>PP</sub> t<sub>i</sub> zjə-wəne deʒ' ] mezə-r ɸerjek<sup>w</sup>e  
 WH.POSS-house at forest-ABS last year

Ø-Ø-š'ə-stæber

3ABS-3SG.IO-LOC-burn.PST.ABS

'the one near whose house the forest burned last year'

# Phasehood and relativization: interim summary

- ▶ ABS, ERG, and IO arguments can be relativized
- ▶ possessor of ABS and PP complement can be relativized
- ▶ possessor of ERG and IO cannot be relativized

## Explanation:

- ▶ ERG and IO are merged at phase edges
- ▶ phase edges are opaque

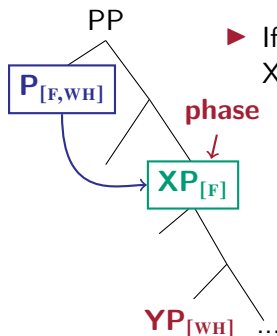
**because the phase intervenes for Agree**

**Evidence:** phases are 'unlocked' by Agree

Result of phase 'unlocking':

Long-distance movement is grammatical when clausebound movement isn't!

# Prediction of Agree-based intervention



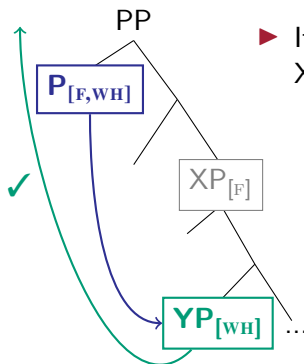
► All **phases** are potential **goals**

► If **P** independently agrees with phase **XP**,  
XP is no longer visible for P

⇒ XP is no longer a phase

(Richards 1998; Rackowski and Richards 2005; van Urk and Richards 2015; Halpert 2019; Ershova to appear)

# Prediction of Agree-based intervention



- ▶ All **phases** are potential **goals**
- ▶ If **P** independently agrees with phase **XP**,  
XP is no longer visible for P  
⇒ XP is no longer a phase
- ▶ **P** can probe into **XP**.
- ▶ **YP** inside phase **XP** is closest goal.  
⇒ **YP** skips phase edge.

(Richards 1998; Rackowski and Richards 2005; van Urk and Richards 2015; Halpert 2019; Ershova to appear)

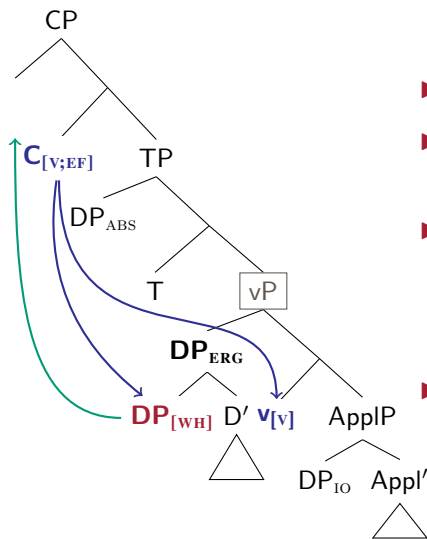
## Prediction:

A phase can become transparent if it independently agrees with the probe.

## Confirmed by long-distance possessor extraction:

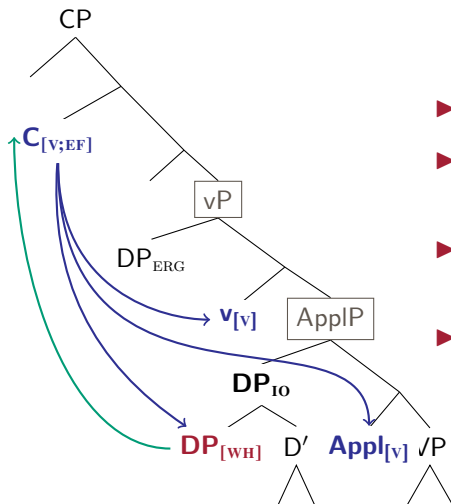
Possessor of ERG and IO can  $\bar{A}$ -move  
if embedded C agrees with v and Appl **before**  $\bar{A}$ -probing.

# C agrees with v and Appl $\Rightarrow$ possessors can move



- ▶ C agrees with v in [v]
- ▶ vP is no longer visible for C  
 $\Rightarrow$  vP is no longer a phase
- ▶ successive-cyclic movement triggered by edge feature [EF]  
(Chomsky 2008; Heck and Müller 2003; Müller 2010, 2011; Georgi 2014, 2017)
- ▶ [EF] probes **after** [v]  
 $\Rightarrow$  C can probe into  $D_{ERG}$   
possessor of ERG can move!

# C agrees with v and Appl $\Rightarrow$ possessors can move



- ▶ C agrees with v in  $[v]$
- ▶ vP is no longer visible for C  
 $\Rightarrow$  vP is no longer a phase
- ▶ C agrees with Appl  
 $\Rightarrow$  ApplP is no longer a phase
- ▶  $[EF]$  probes **after**  $[v]$   
 $\Rightarrow$  C can probe into D<sub>IO</sub>  
possessor of IO can move!



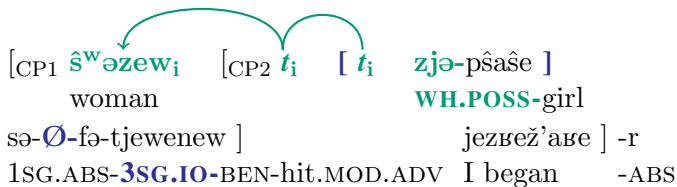
# Long-distance relativization: possessor of ERG can move

[CP1 **Op<sub>i</sub>** [CP2 **t<sub>i</sub>** [ **t<sub>i</sub>** **zjə-sabəj-xe-m** ] wered  
**WH.POSS**-child-PL-OBL song  
Ø-q-**a**-ʔ<sup>w</sup>enew ] wəmədere ] -r  
3ABS-DIR-**3PL.ERG**-say.MOD.ADV you did not consent -ABS

lit. 'the one whose you did not consent for [ \_\_ children] to sing?'

\*Embedded clause is a full CP (Ershova to appear)

# Long-distance relativization: possessor of IO can move



lit. 'the woman whose I began to call [ \_\_ daughter]'

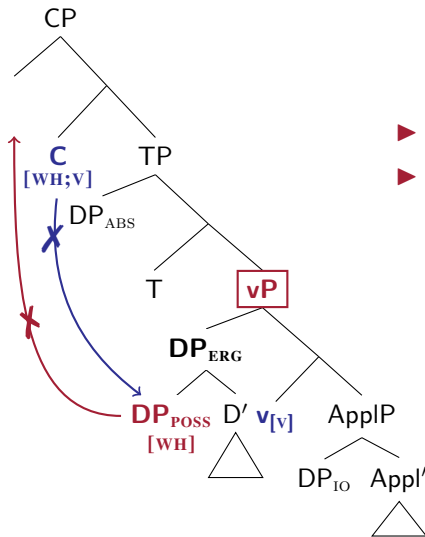
# Why is short possessor relativization ungrammatical?

If C agrees with v and Appl in [v],  
why are vP and ApplP phases for clausebound possessor  
relativization?

**Answer:** difference between contentful [WH] and edge feature [EF]

- ▶ [WH] probes **before** [v]
- ▶ [EF] probes **after** [v]
- ▶ Feature ordering: [WH > v > EF] (Georgi 2017)

# Agree can't save clausebound possessor extraction



- ▶ probes on C:  $[WH > v]$
- ▶  $[WH]$  probes first  
⇒  $[v]$  cannot unlock vP phase

# Phases in the syntax: summary

Inventory of locality domains (=syntactic phases):  
**vP**, **ApplP**, CP, and DP

## Properties:

- ▶ Only the phase edge can move.  
Subextraction is impossible:
  - ▶ from the phase edge
  - ▶ from the phase complement
- ▶ Phases can be ‘unlocked’ by Agree
- ▶ Explains constraints on possessor relativization:
  - ▶ ERG and IO are phase edges: Spec,vP and Spec,ApplP
  - ▶ possessors cannot move from ERG and IO,  
**unless** C has agreed with vP and ApplP

# Phase opacity ↔ spellout?

**Q:** Are phases opaque because they're transferred to PF?

**A: No.**

Material inside a phase can be accessed if the phase is 'unlocked' by Agree.

**Q:** Are syntactic phases relevant for spellout?

**A: Partially and indirectly.**

Not all syntactic phases are spellout domains.

- ▶ Background on West Circassian
- ▶ Phases in the syntax: interveners for Agree
- ▶ **Phases at the interface: spelling out polysynthesis**
- ▶ Wrapping up: phases in polysynthesis

Connection between phase opacity and spellout

⇒ phases are often analyzed as prosodic constituents

(e.g. Newell 2008; Dobashi 2013)

## In West Circassian:

**Prosodic constituents:** DP and CP

**Evidence:** contrast in syntax-to-prosody mapping

- ▶ DP phase is mapped to one prosodic word
- ▶ CP phase may contain multiple prosodic words

**Contrast with syntactic phases:**

vP and ApplP are not prosodic constituents!

**Evidence** from nominalizations. (Ershova 2020)



# DP phases at the interface

Phrasal modifiers and complements in DP are pseudo-incorporated because DP phase is mapped to a single phonological word.

## MATCH PHASE(-TO-WORD):

A **phase** in syntactic constituent structure must be matched by a **prosodic word** in phonological representation.

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

# One word, but no syntactic noun incorporation

- ▶ **nominal head** + **modifiers** = one phonological word  
(← pass language-specific wordhood diagnostics)

(Lander 2017; Ershova 2020)

- ▶ incorporated roots:

- ▶ may be modified

š'e -[ʔaʂə -š'e] -fabe -r  
milk -[sweet -too] -warm -ABS

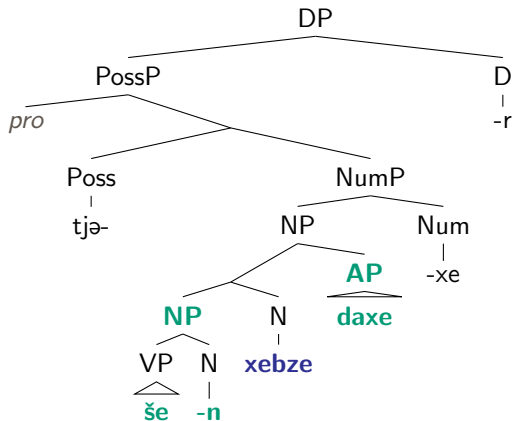
'the warm milk that is too sweet' (Lander 2017:85)

- ▶ may be phrasal

[ç<sup>w</sup>eqe- əč'jə- š'əβən]- 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

'our beautiful rules of conduct'

# CP phase $\neq$ prosodic word

- ▶ CPs can contain multiple prosodic words
- ▶ No verbal noun incorporation

\* sə/s-                      **leɐ**- thač'ə -ɐ  
1SG.ABS/ERG- **dish**- wash -PST

Expected: 'I washed dishes'

**laɐ-xe-r**    Ø-s-thač'ə-ɐ  
**dish-PL-ABS** 3ABS-1SG.ERG-wash-PST

'I washed dishes.' (Ershova 2020:426)

**Explanation:** phase-relativized constraint ranking

- ▶ CP: MATCHWORD  $>$  MATCHPHASE
- ▶ DP: MATCHPHASE  $>$  MATCHWORD

# vP and ApplP: syntactic phases, not spellout domains

vP and ApplP are mapped to

1. a complex prosodic phrase, if embedded in CP
2. (part of) one prosodic word, if embedded in DP

⇒ mapping constraints cannot be relativized to vP and ApplP

vP and ApplP are not spellout domains.

**Evidence from nominalizations**

# Nominalizations: deficient verbal extended projection

Ershova (2020)

- ▶ arguments as possessors or incorporated  
⇒ no verbal licensing/case
- ▶ no verbal  $\phi$ -agreement  
→ possessor  $\phi$ -agreement

lebe-xe-r      Ø-      s-      e-      thač'ə      **FINITE**  
dish-PL-ABS    **3ABS-**    **1SG.ERG-**    DYN-    wash  
'I am washing dishes.'

**wjə-**      lebe-      thač'ə      -č'e      **NOMINALIZATION**  
**2SG.POSS-**    dish-      wash      -NML  
'your manner of washing dishes'

# v and Appl are present in nominalizations

- ▶ nominalizations include causatives

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

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

- ▶ nominalizations include applicatives

ja-            haž<sup>w</sup>ə- **de-**    žeg<sup>w</sup>ə -č'e  
3PL.POSS- puppy- **COM-** play -NML

'their way of playing with puppies'

# Nominalizations include vP

External arguments are present, overtly or as PRO:

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

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



# Verbal structure in nominalizations

Nominalizations include vP and ApplP.

## Evidence:

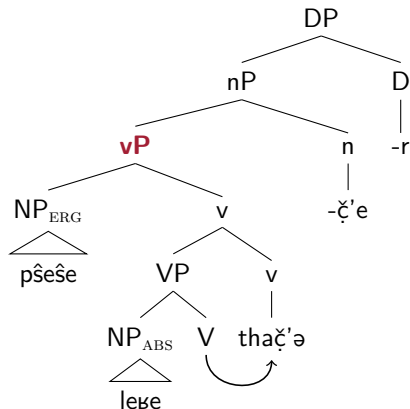
- ▶ causative and applicative morphology
- ▶ external argument is syntactically present

**However:** no verbal  $\varphi$ -agreement

Ershova (2023a): C **licenses** agreement on v and Appl

← The same agreement unlocks vP and ApplP!

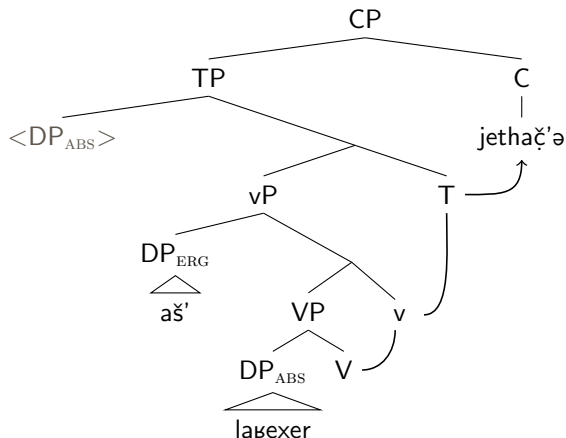
# Nominalizations: vP is pronounced as part of one word



[**vP** pșeșe- leve- thač'ə ] -č'e-r  
girl- dish- wash -NML-ABS

'the girls' manner of dish-washing'

# Finite clause: vP is mapped to multiple words



a-š'      laɁe-xe-r      j-e-thač'ə  
that-OBL   dish-PL-ABS   3SG.ERG-DYN-wash

'She is washing the dishes.'

# Contrast with CP in nominalization

CP is mapped to multiple prosodic words  
**even when embedded in a nominalization.**

[<sub>DP</sub> wjə-      [<sub>vP</sub> leɐe-thač'ə ] -č'e  
2SG.POSS-      dish-wash      -NML  
                         [<sub>CP</sub> k<sup>w</sup>əxnjem      qeɓzenəwə      jələnəw ] ]  
                         kitchen.OBL      cleanliness      to be there

'your manner of dish-washing so that it is clean in the kitchen'

⇒ CP and DP are prosodic domains,  
but vP and ApplP are not.

# Syntactic phases $\neq$ phases at the interface

- ▶ Syntax-to-prosody rules are defined over phases: DP and CP
- ▶ vP (and ApplP) are syntactic phases, but irrelevant for prosodic rules

XP is a syntactic phase  $\nRightarrow$  XP is a prosodic domain

- ▶ Background on West Circassian
- ▶ Phases in the syntax: interveners for Agree
- ▶ Phases at the interface: spelling out polysynthesis
- ▶ **Wrapping up: phases in polysynthesis**

# Wrapping up: locality and spellout

West Circassian provides evidence for  
**a mismatch between syntactic phases and spellout domains:**

## 1. Syntactic phases = locality domains

- ▶ (at least) CP, vP, ApplP, and DP
- ▶ opaque for subextraction by intervention
- ▶ elements can 'escape' through the edge
- ▶ can be 'unlocked' by Agree

## 2. Interface domains

- ▶ DP and CP
- ▶ targeted for syntax-PF spellout rules
- ▶ spellout rules do not affect syntactic locality

# The view from polysynthesis

Dynamic phasehood in West Circassian is connected to **polysynthesis**:

- ▶ polypersonal  $\varphi$ -probes are licensed by Agree with  $C^0$  (Ershova 2023a)  
**Agree with  $C^0$**  can render phases transparent for probing

Clausebound possessor extraction is ungrammatical,  
but long-distance possessor extraction is fine!

- ▶ **syntax-to-prosody rules** map phrasal constituents to phonological words (Ershova 2020)  
These constituents are identifiable as spellout domains

Phases (vP and ApplP) are spelled out differently  
depending on the larger spellout domain (CP or DP).



# Thank you!

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- ▶ This talk relies heavily on Ershova (2020) and Ershova (to appear). Thanks to everyone who helped with the papers (too many to list!)

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- ▶ **Closest** (modified from Rackowski and Richards 2005:579; my additions in **boldface**)

A goal  $\alpha$  is the closest one to a given probe if there is no distinct goal  $\beta$  such that for some **distinct** X (X a head or maximal projection), X c-commands **or dominates**  $\alpha$  but does not c-command **or dominate**  $\beta$ .

- ▶ **Additional assumptions** (Rackowski and Richards 2005:582)

- ▶ A probe must Agree with the **closest** goal  $\alpha$  that **can move**.
- ▶ A goal  $\alpha$  **can move** if it is a phase.
- ▶ Once a probe P is related by Agree with a goal G, P can ignore G for the rest of the derivation (Richards 1998; Hiraiwa 2001).

(Ershova to appear)