Phases in the syntax and at the interfaces

Lessons from polysynthesis

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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; van Urk 2020, among many others)

Movement must be successive-cyclic

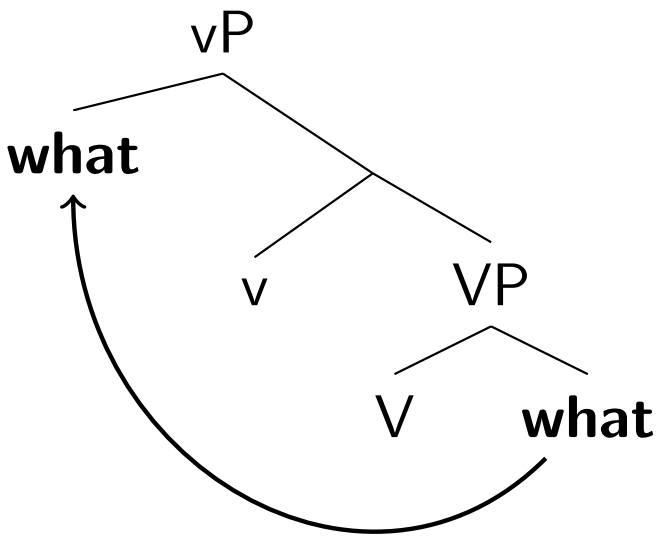
What do you think that John bought?

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

Movement must be successive-cyclic

What do you think that John bought?

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



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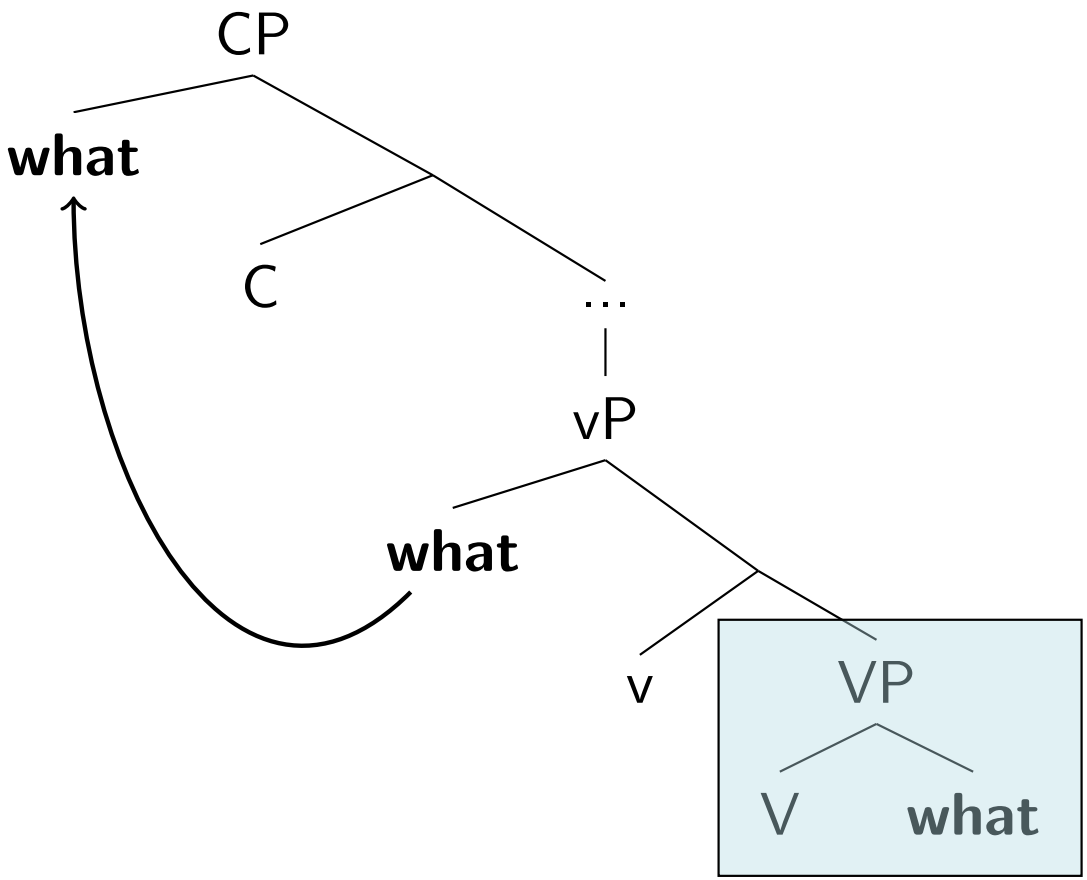

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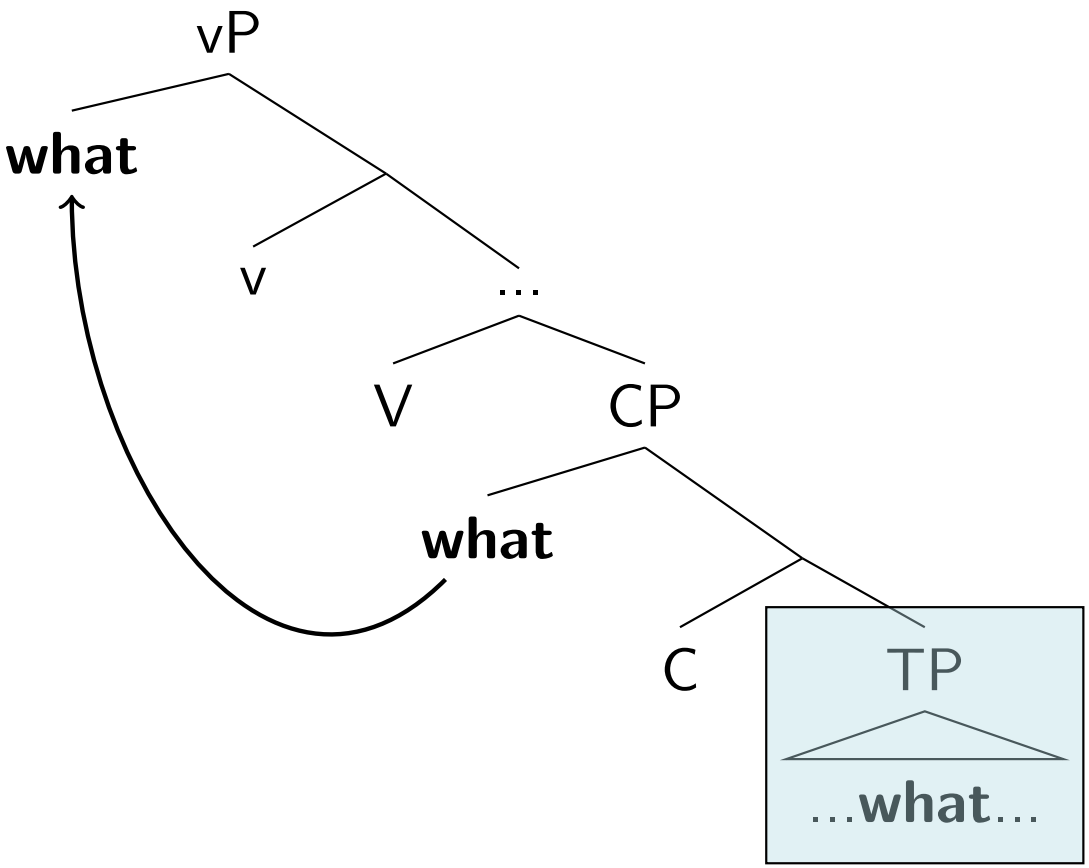

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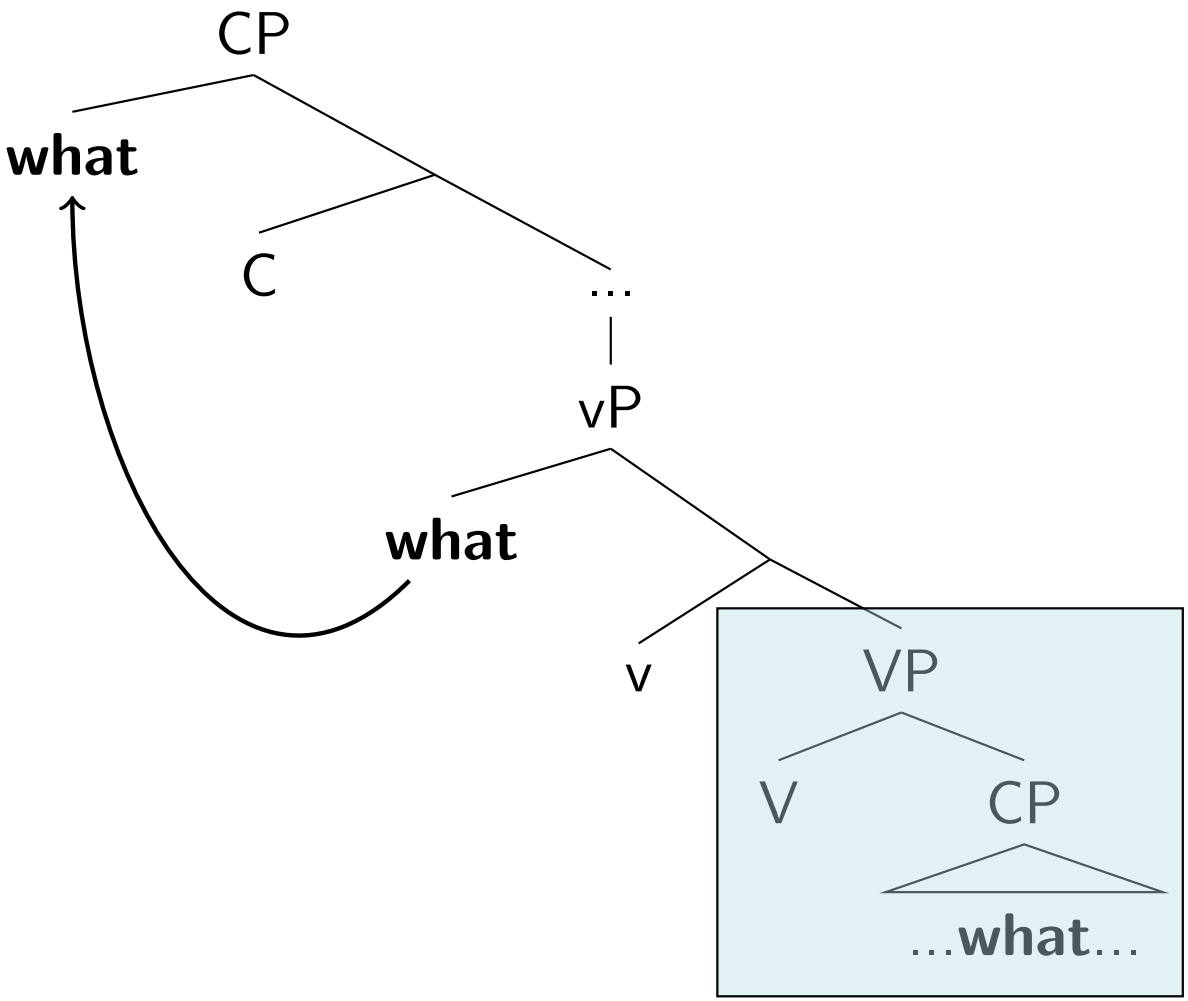
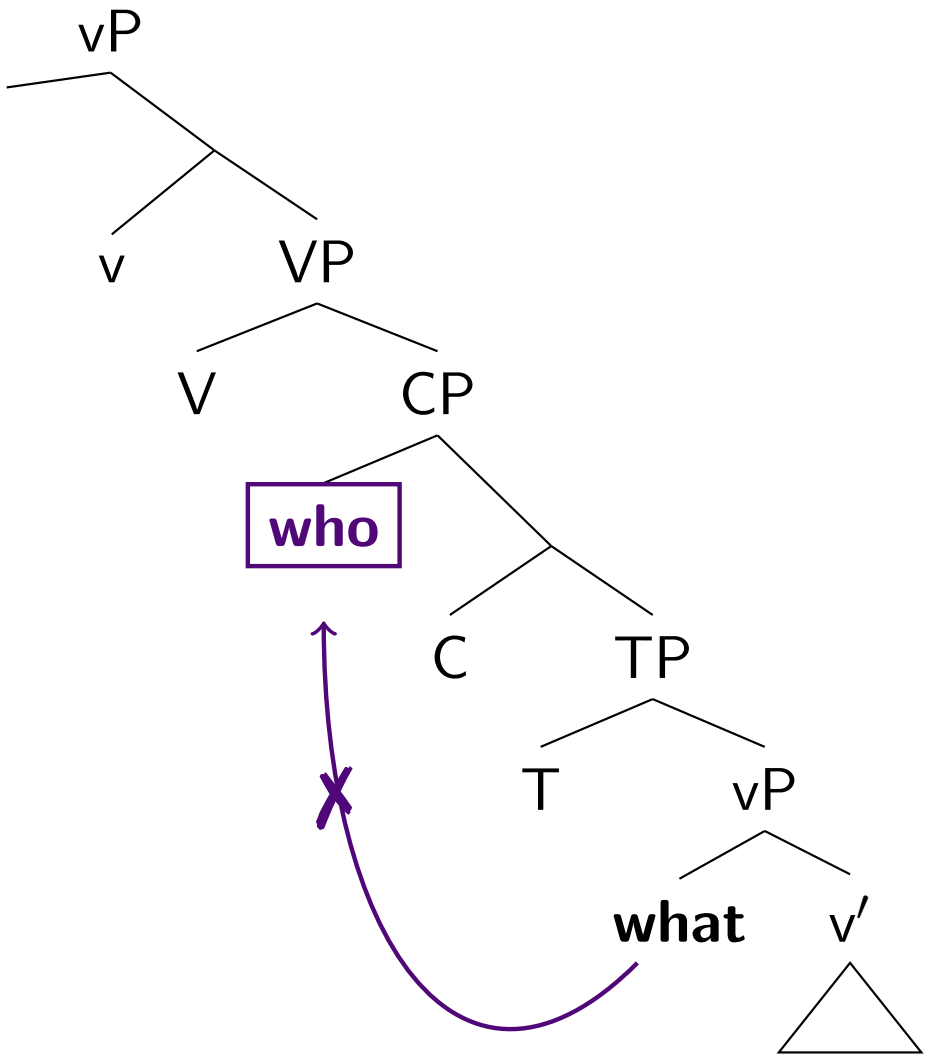


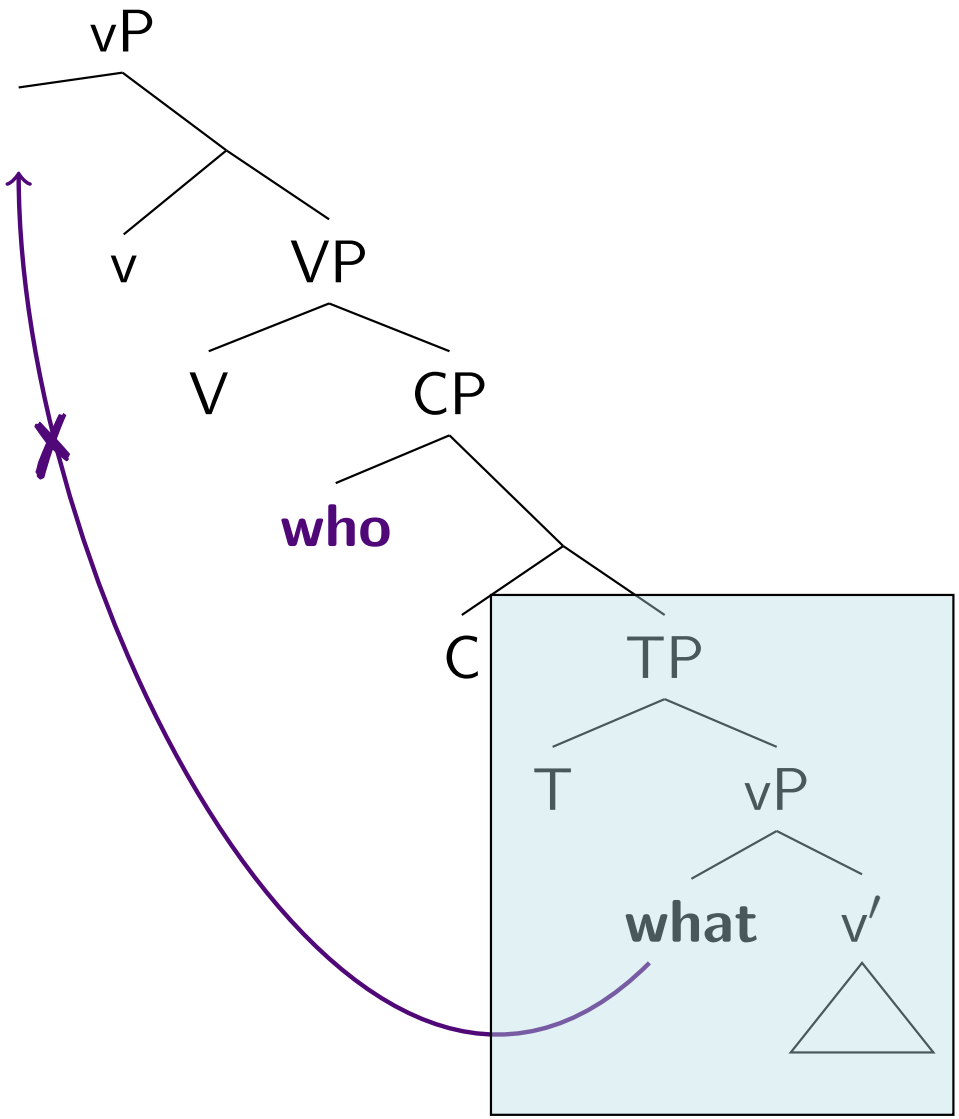
Movement must be successive-cyclic

*__What__ do you know [$_{CP}$ __who__ brought ~~__what__~~]?



Movement must be successive-cyclic

*__What__ do you know [$_{CP}$ __who__ brought ~~__what__~~]?



Why are phases opaque for movement?

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

1. Phases are **spellout domains**
   $\Rightarrow$ movement limited by interface conditions
   - transfer to PF $\rightarrow$ opaqueness for syntactic operations

     (e.g. Uriagereka 1999, 2012; Chomsky 2001, 2008)
   - phases are linearized at spellout
     $\rightarrow$ 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)

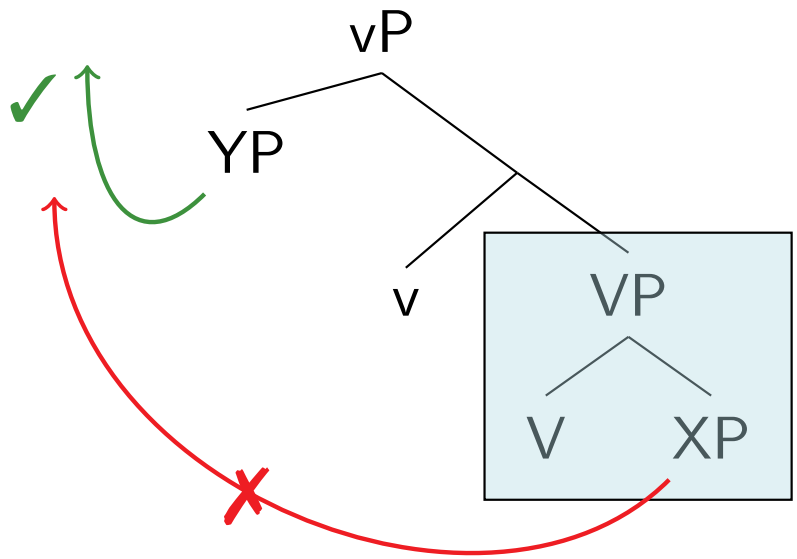
Approach 1: Spellout domains are opaque

Chomsky (2000) *et seq.*:

Phases are **barriers for movement**

because their complements are **spelled out**.

Transfer to PF ⇒ syntactic opaqueness

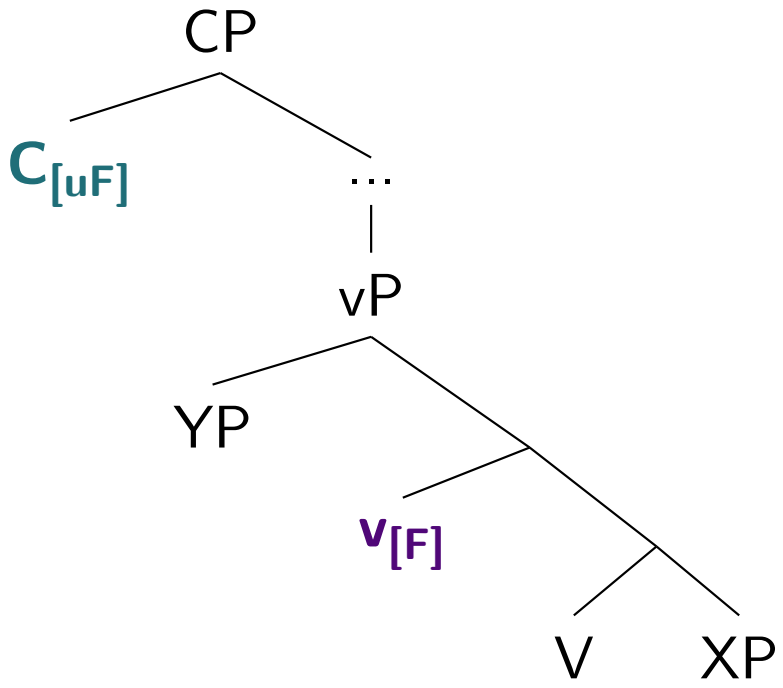


Approach 2: Defective interveners are opaque

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

Phases **intervene** between Probes and Goals

because of their **features**.



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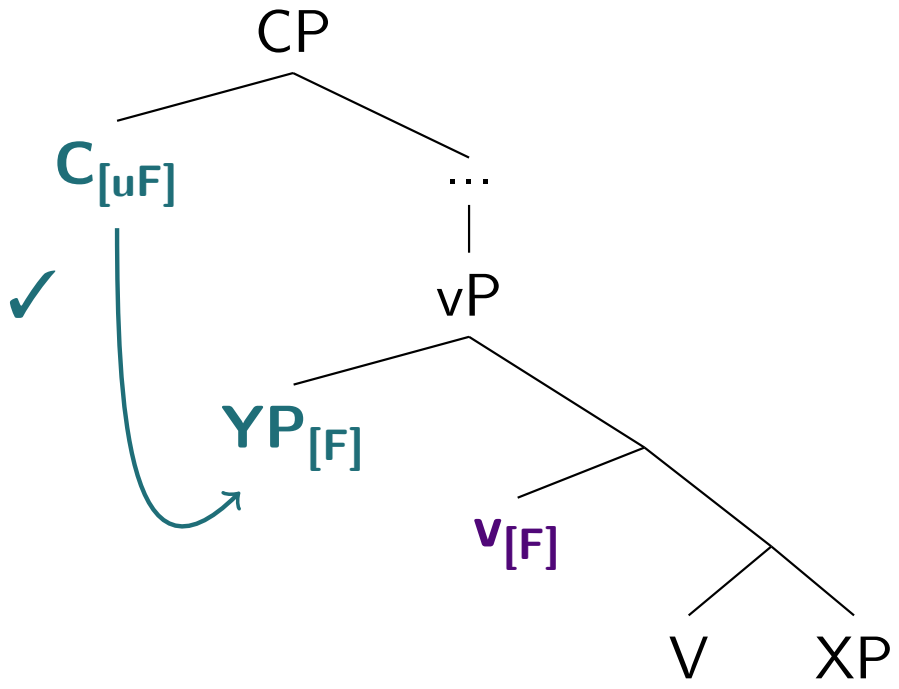

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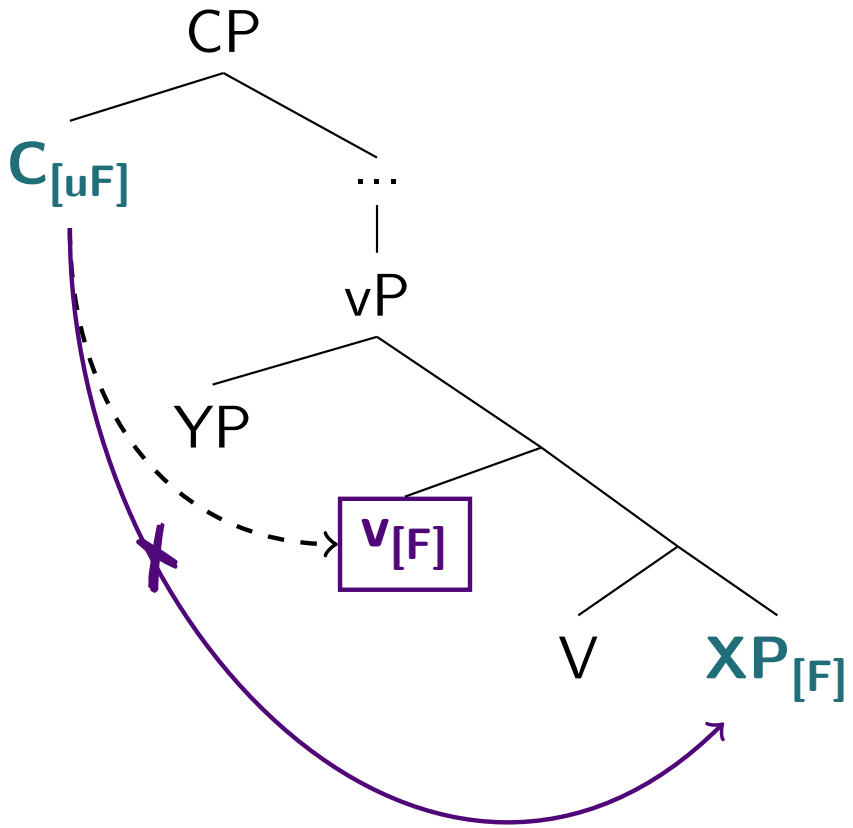


Syntactic domains and interface domains: the proposal

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 ⇒ C can probe into vP

In West Circassian:
Further embedding makes extraction **more accessible!**

⇒ Locality domains are not opaque due to PF transfer.

Locality domains $\neq$ spellout domains

- Syntactic opaqueness $\not\Leftarrow$ 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 φ-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**

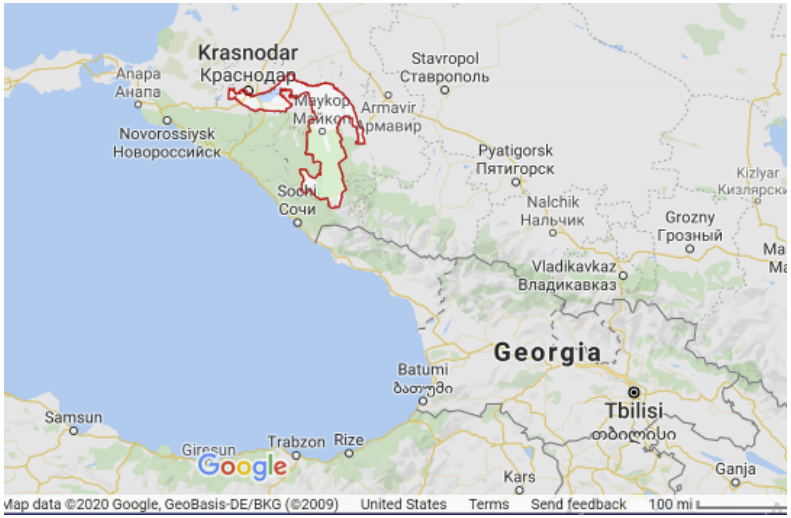
Roadmap

- **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

West Circassian (or Adyghe):

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



Data:

- fieldwork on the **Temirgoy dialect** in the Shovgenovsky district of Adygea (2017-2019)
- Adyghe Corpus by Timofey Arkhangelskiy, Irina Bagirokova, Yury Lander, and Anna Lander (`http://adyghe.web-corpora.net/`)

West Circassian is polysynthetic

Agglutinating prefixal and suffixal morphology:

wəqəzereŝhapərəzʁewəkʲʷəreječ'əž'əŝʷəʁaʁer

wə-	qə-	zere-	ŝha-	pə-	rə-	z-	ʁe-
2SG.ABS-	DIR-	FACT-	head-	LOC-	TRANS-	1SG.ERG-	CAUS-
wəkʲʷereje	-č'ə		-ž'ə	-ŝʷə	-ʁa	-ʁe	-r
fall	-go.out		-RE	-POT	-PST	-PST	-ABS

'that I was able to make you turn a somersault'

(Lander and Testelets 2017:952)

West Circassian is polysynthetic

Head marking and pro-drop:

səqəpfarjəʁeλeʁʷəʁ

me **for your sake** **to them** **he**

sə- qə- p-f- a-r- jə- ʁe-

1SG.ABS- DIR- 2SG.IO+BEN- 3PL.IO+DAT- 3SG.ERG- CAUS-

λeʁʷə -ʁ

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

[cʷeqe- əčʼjə- šʼəʁən]- **tʷeč̣ʼan** -xe -r
footwear- and- clothes- shop -PL -ABS

‘shops of shoes and clothes’ (Lander 2017:93)

[abʒexe]- **šəw** -jə- šʼ
Abzakh- horseman -LNK- three

‘three Abzakh horsemen’ (Lander 2017:83)

Head marking on nominals

s-	šəpχ^{w}əxer	
1SG.POSS-	sister.PL.ABS	

‘my sisters’ **INALIENABLE**

t-	**jə-**	ʁ^{w}ənеʁ^{w}əxem
1PL.POSS-	**ALIEN-**	neighbor.PL.OBL

‘our neighbors’ **ALIENABLE**

Case marking

-r (ABS):

- intransitive subject
- direct object

-m (OBL):

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

S

mə pŝaŝe-**r** daxew qaŝʷe
this girl-**ABS** well dances

'This girl dances well.'

A **O**

sabəjxe-**m** haxe-**r** qaλeʁʷəʁ
children-**OBL** dogs-**ABS** saw

'The children saw the dogs.'

IO

mafe-qes jeǯaṗe-**m** seḳʷe
day-each school-**OBL** go

'I go to school every day.'

Case marking on possessors

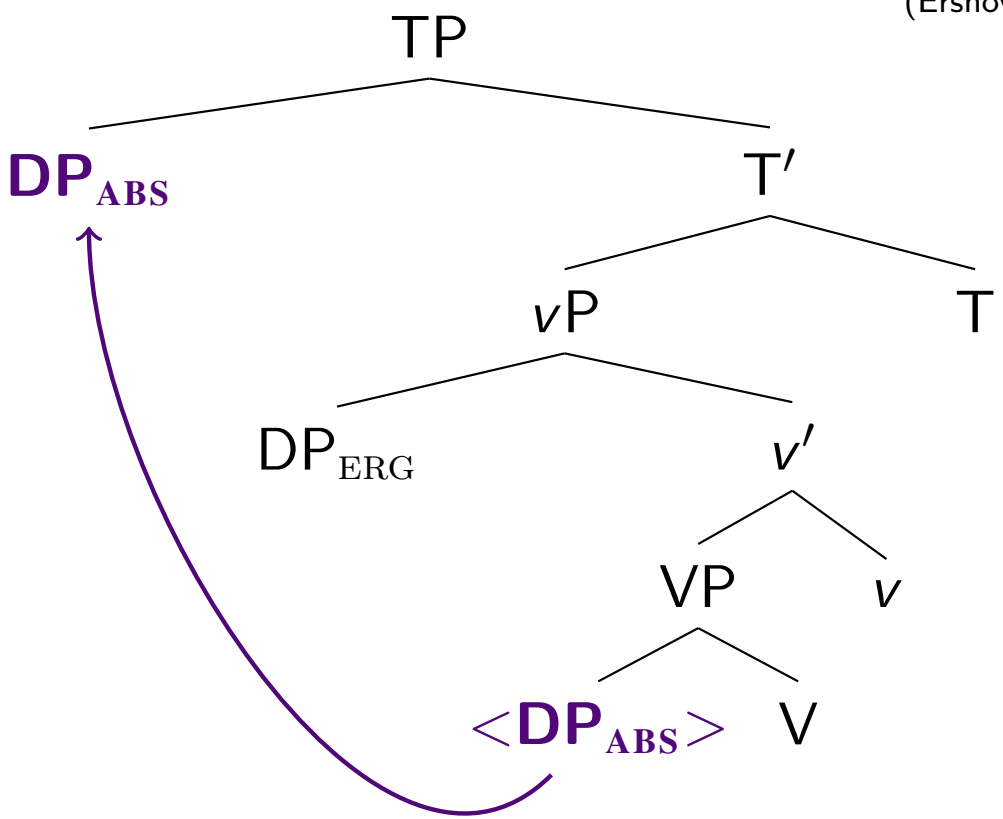
pŝaŝe-**m**	Ø-jə-pŝeŝeʁʷ
girl-**OBL**	3SG.POSS-ALIEN-female.friend

'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.)

Basic clause structure: summary

West Circassian:

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

Roadmap

- 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

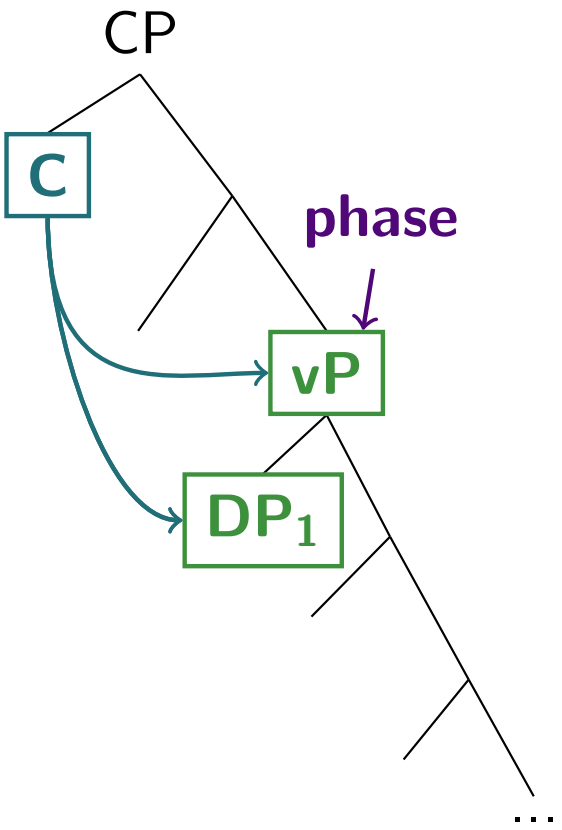
Inventory of locality domains (=syntactic phases):
vP, **ApplP**, CP, and DP

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.**
  $\Rightarrow$ 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_1 and vP are both **closest goals**

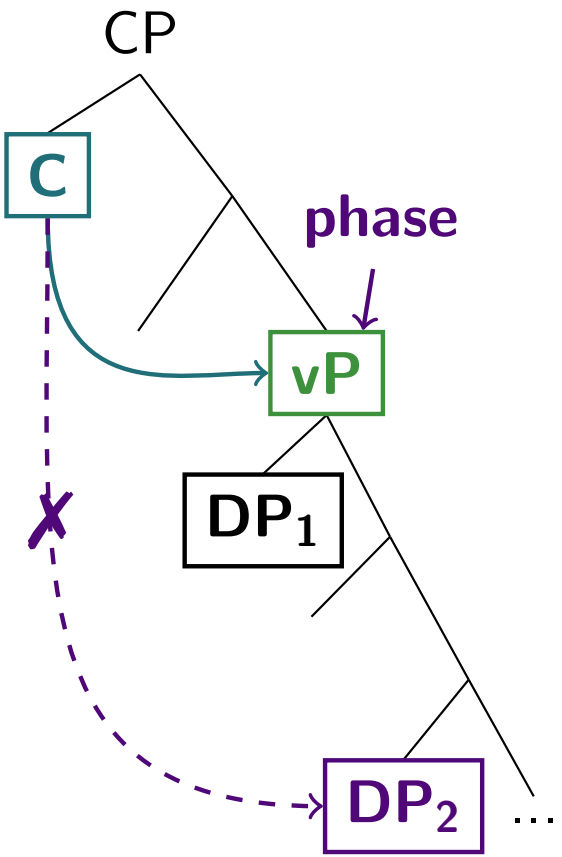
because there is no XP
which c-commands or dominates DP_1,
but does not c-command or dominate vP

> 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 2024)

Phases as interveners



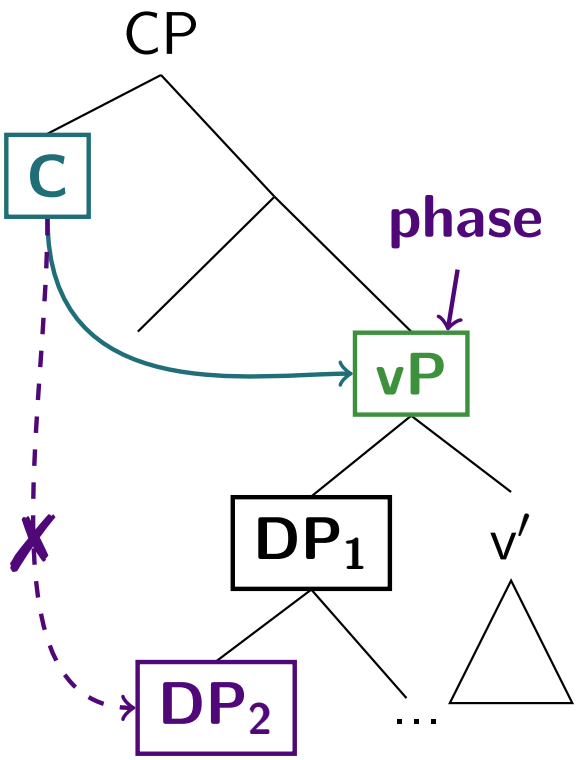
- Movement is triggered by Agree between a **probe** and the closest **goal**
- All **phases** are potential **goals**
- DP_2 is cannot move — vP is **closer**:

  DP_1 c-commands DP_2,
  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 2024)

Phase edges are opaque for subextraction



- Movement is triggered by Agree between a **probe** and the closest **goal**
- All **phases** are potential **goals**
- DP_2 is cannot move — vP is **closer**:

  DP_1 dominates DP_2,
  but does not dominate vP

Phase edge can move,
but is opaque for subextraction.

(Ershova 2024; 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’		txəλə-r			[mə	ç̣əfə-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:

WH-AGREEMENT

WH-MOVEMENT

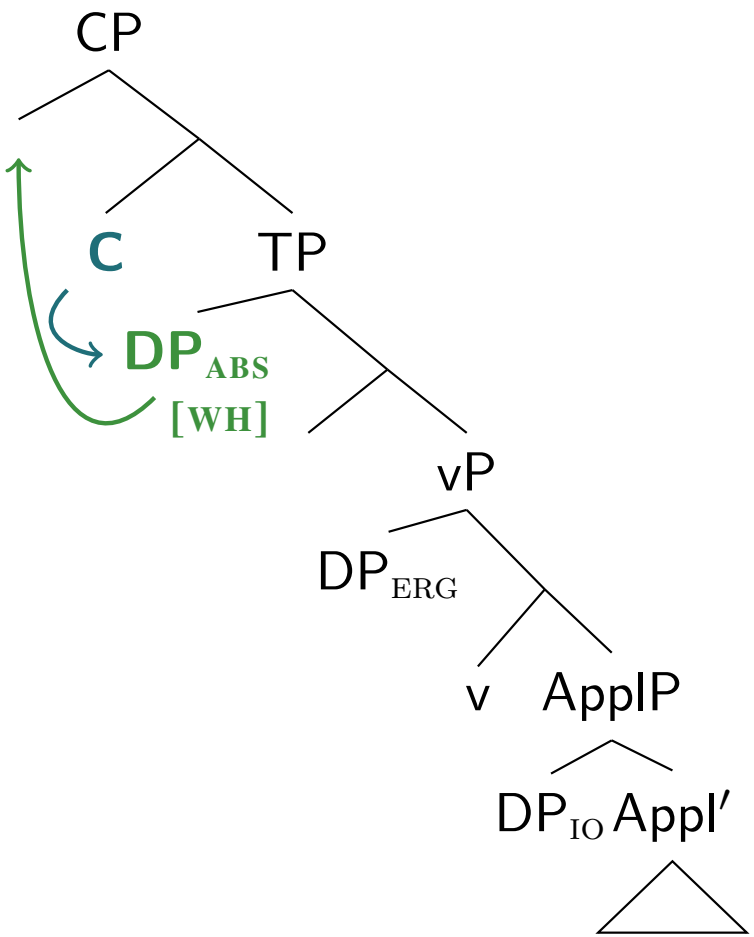
[**Op**	txəλə-r	**__IO**	Ø-	**ze-**	r-	jə-	tə-ʁe	]
	book-ABS		3ABS-	**WH.IO-**	DAT-	3SG.ERG-	give-PST	

ç̣əfə-r

person-ABS

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

Any argument can be relativized

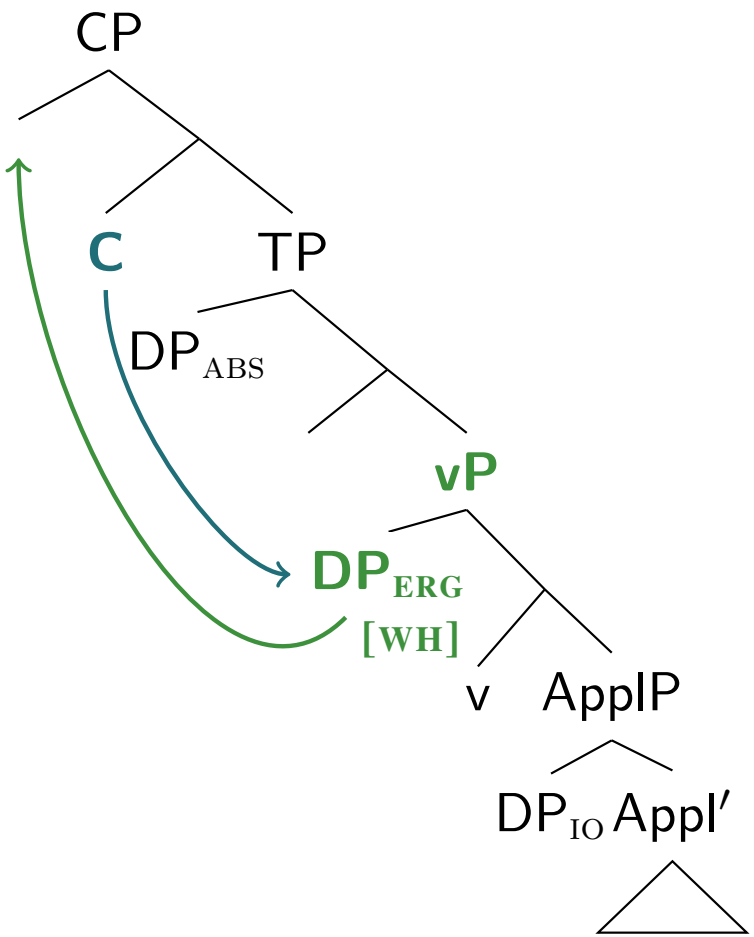


✓ **ABS**

no phase boundary between C and Spec,TP

$\Rightarrow$ ABS can move

Any argument can be relativized



✓ **ABS**

no phase boundary between C and Spec,TP

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✓ **ERG**

Spec,vP is equidistant with vP phase

$\Rightarrow$ ERG can move

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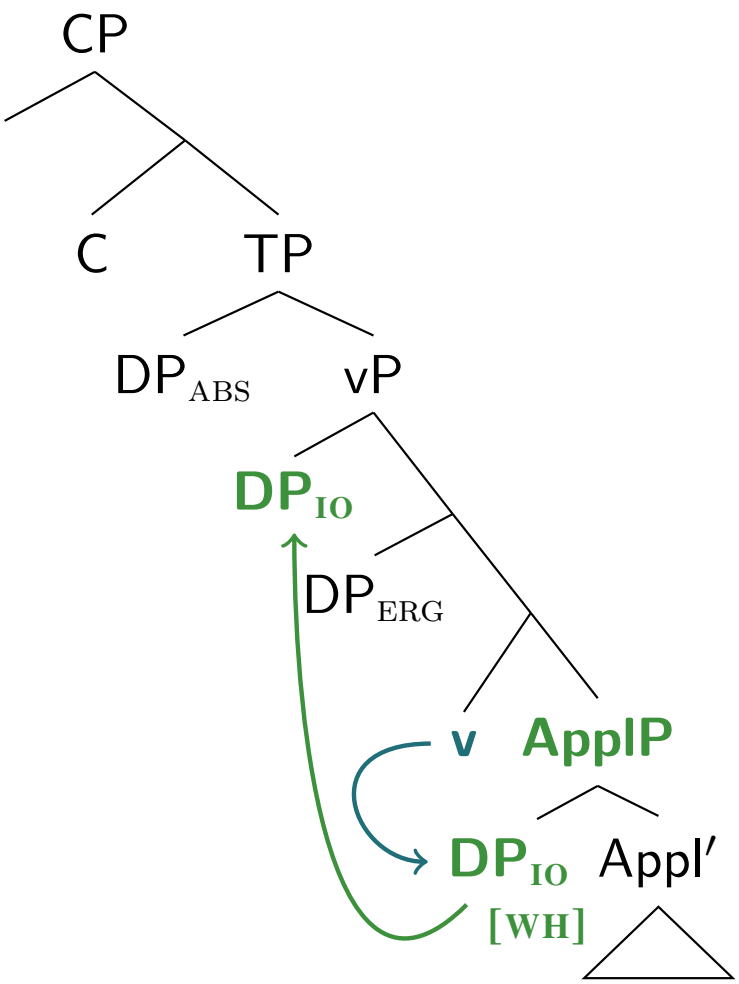


✓ **ABS**

no phase boundary between C and Spec,TP

$\Rightarrow$ ABS can move

✓ **ERG**

Spec,vP is equidistant with vP phase

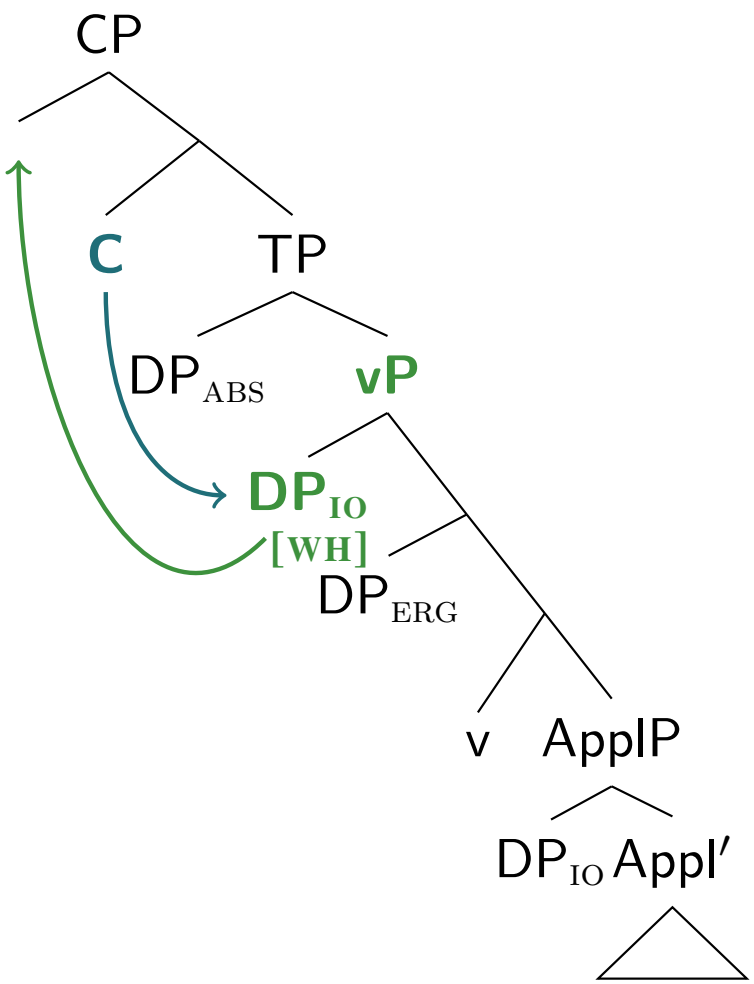
$\Rightarrow$ ERG can move

✓ **IO**

ApplP is a phase (McGinnis 2000, 2001)
Spec,ApplP is equidistant with ApplP

$\Rightarrow$ IO can move to Spec,vP

Any argument can be relativized



✓ **ABS**

no phase boundary between C and Spec,TP

$\Rightarrow$ ABS can move

✓ **ERG**

Spec,vP is equidistant with vP phase

$\Rightarrow$ ERG can move

✓ **IO**

ApplP is a phase (McGinnis 2000, 2001)
Spec,ApplP is equidistant with ApplP

$\Rightarrow$ IO can move to Spec,vP

$\rightarrow$ Spec,CP

Any argument can be relativized

χərbəzew	[	__ABS	a-š’	**Ø-**	ə-	bzə-ʁe-r	]
watermelon			that-ERG	**WH.ABS-**	3SG.ERG-	cut-PST-ABS	

‘the watermelon that he cut’ **✓ABS REL**

[txəλə-r	__IO	Ø-	**ze-**	r-	jə-	tə-ʁe	]	ç̣əfə-r
book-ABS		3ABS-	**WH.IO-**	DAT-	3SG.ERG-	give-PST		person-ABS

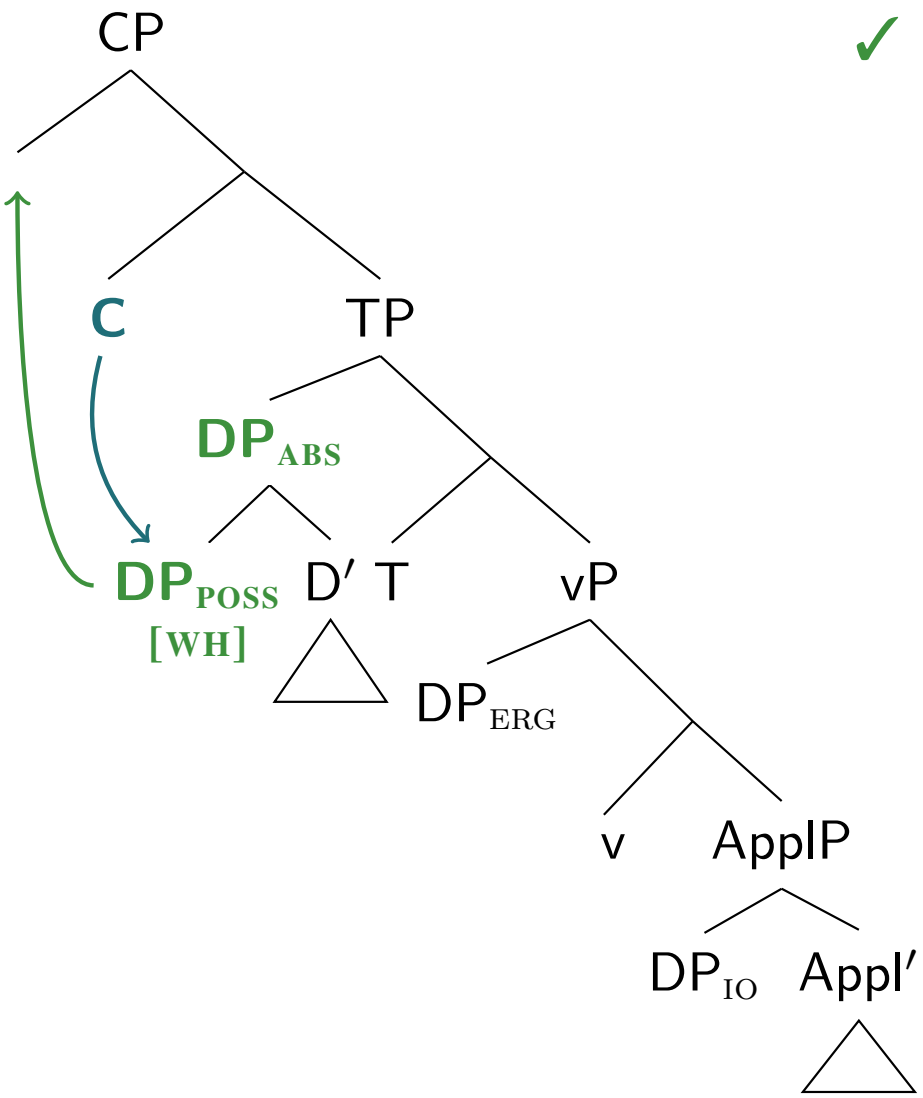
‘the person to whom s/he gave the book’ **✓IO REL**

č̣’alew	[	apč’ə-r	__ERG	Ø-	**zə-**	qʷəta-ʁe-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



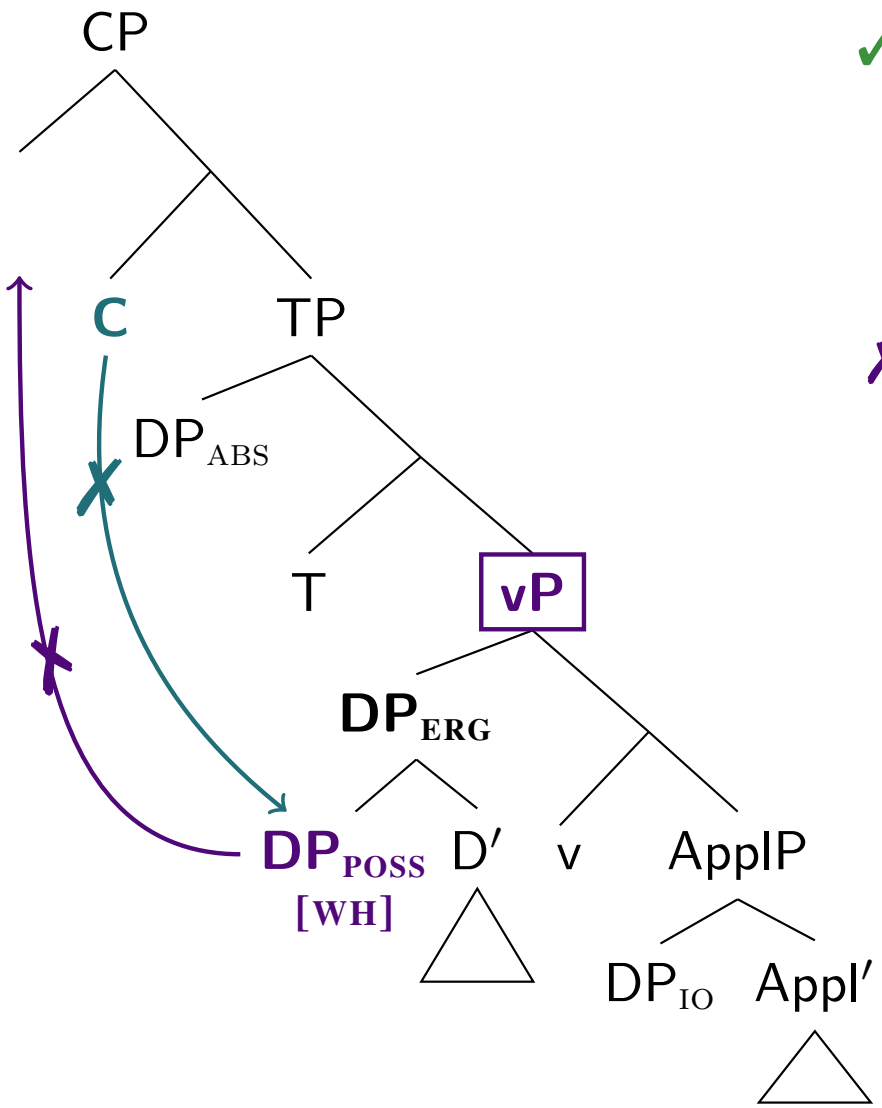
✓ **possessor of ABS**

No phase between C and TP

$\Rightarrow$ ABS and POSS are equidistant

$\Rightarrow$ POSS_{ABS} can move

Phase edges are opaque: possessor extraction



✓ **possessor of ABS**

No phase between C and TP

$\Rightarrow$ ABS and POSS are equidistant

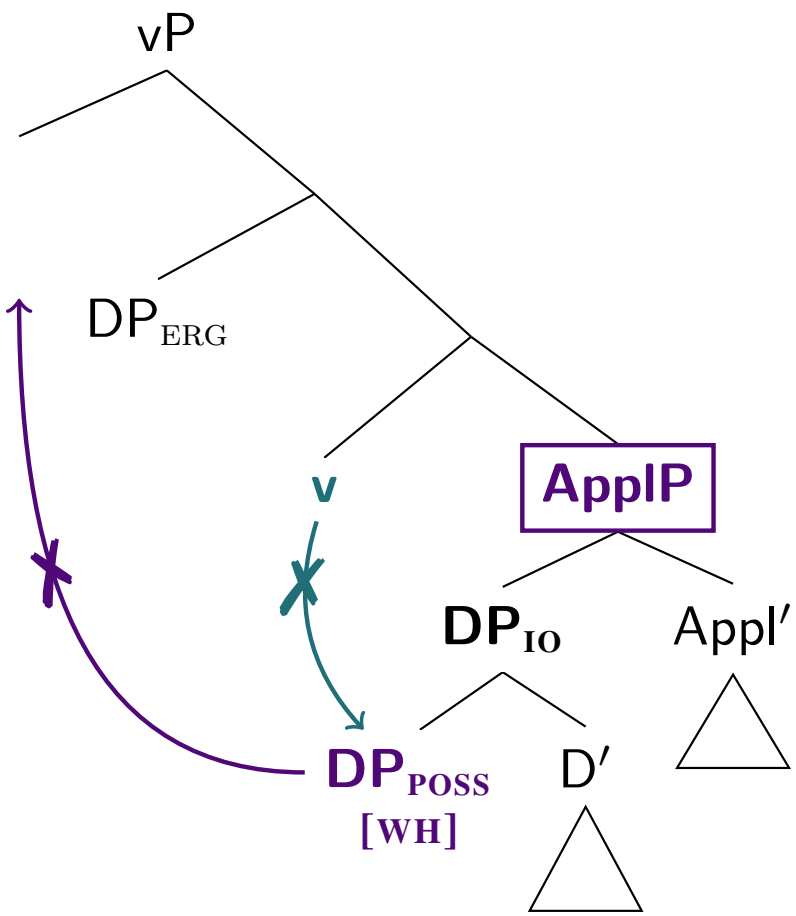
$\Rightarrow$ POSS_{ABS} can move

✗ **possessor of ERG**

vP is closer to C than POSS

$\Rightarrow$ POSS_{ERG} cannot move

Phase edges are opaque: possessor extraction



✓ **possessor of ABS**

No phase between C and TP

⇒ ABS and POSS are equidistant

⇒ POSS$_{\text{ABS}}$ can move

✗ **possessor of ERG**

vP is closer to C than POSS

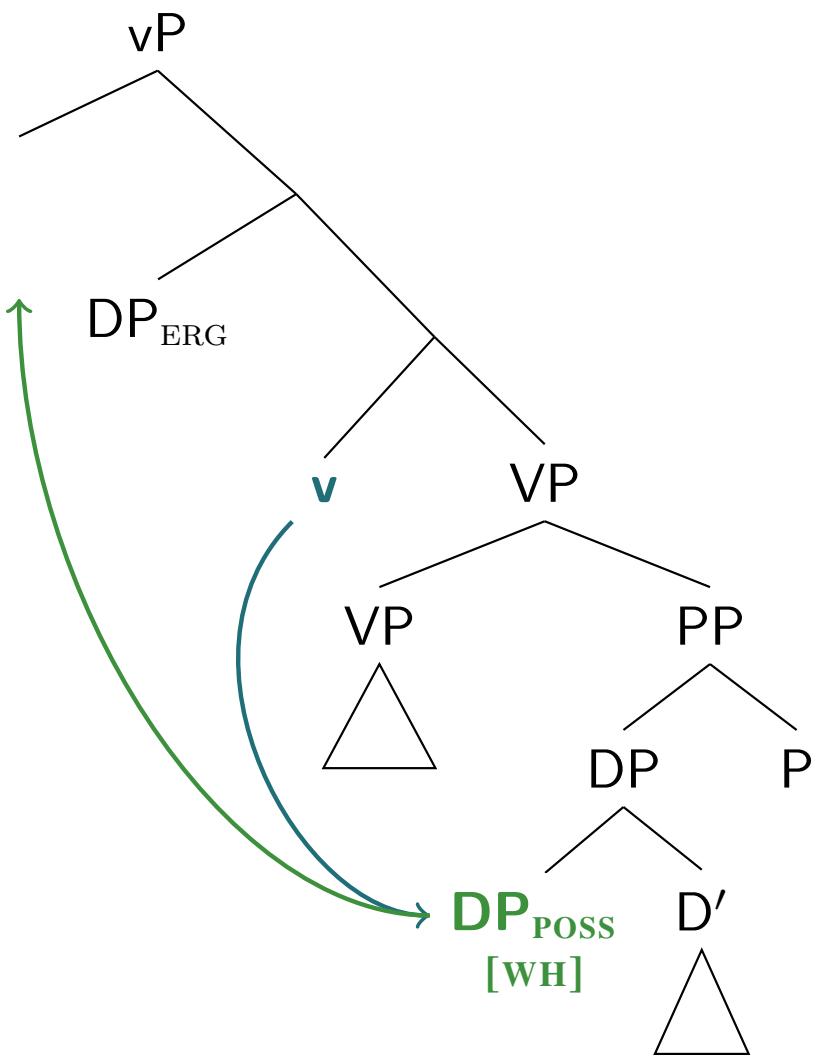
⇒ POSS$_{\text{ERG}}$ cannot move

✗ **possessor of IO**

ApplP is closer to v than POSS

⇒ POSS$_{\text{IO}}$ cannot move

Phase edges are opaque: possessor extraction



✓ **possessor of ABS**

No phase between C and TP

⇒ ABS and POSS are equidistant

⇒ POSS_{ABS} can move

✗ **possessor of ERG**

vP is closer to C than POSS

⇒ POSS_{ERG} cannot move

✗ **possessor of IO**

ApplP is closer to v than POSS

⇒ POSS_{IO} cannot move

✓ **possessor of PP complement!**

PP is not at a phase edge

⇒ v can agree with POSS_{PP}

ABS external argument is transparent for subextraction

ŝʷəzewᵢ	[t_i	z-	jəpŝaŝe	](ABS)	daxew	Ø-	qaŝʷerer
woman		WH.POSS-	girl		well	3ABS-	dance.DYN.ABS

'the woman whose daughter dances well'

ABS internal argument is transparent for subextraction

ŝʷəzewᵢ	[t_i	**zə-**	qʷe]**(ABS)**	hapsem
woman		**WH.POSS-**	son	prison.OBL

Ø- Ø-č̣-a-ʒaʁe-r

3ABS- 3IO.SG-LOC-3PL.ERG-throw.PST.ABS

'the woman whose son they threw in jail'

Possessor of ERG or IO cannot be relativized directly

POSS WH-AGREEMENT

Op$_i$	[t_i **z-**jə-č̣'ale		**](ERG)**	daxew	wered(ABS)
	WH.POSS-ALIEN-boy			well	song
Ø-	qe-	**zə-**	ʔʷerer		
3ABS-	DIR-	**WH.ERG-**	sing.DYN.ABS		

ERG WH-AGREEMENT **2 WH-MARKERS**

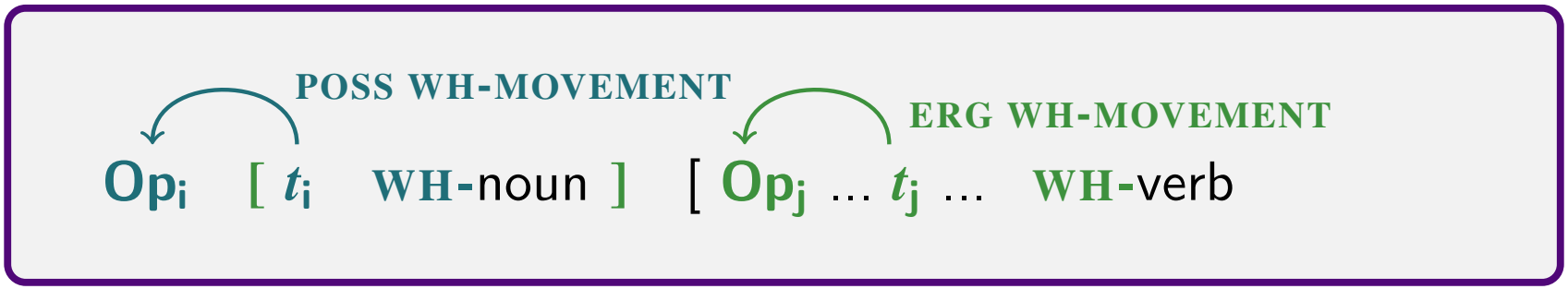
POSS WH-AGREEMENT

*	Op$_i$	[t_i **z-**jə-č̣'ale	**](ERG)**	daxew	wered(ABS)
		WH.POSS-ALIEN-boy		well	song
	Ø-	q-	**ə-**	ʔʷerer	
	3ABS-	DIR-	**3SG.ERG-**	sing.DYN.ABS	

*** REGULAR φ-AGREEMENT**

'the one whose son sings well'

Multiple wh-agreement as a pseudocleft



Evidence: case connectivity effects (Ershova 2021, 2024)

Possessor of ERG cannot be extracted

PSEUDOCLEFT REPAIR:

ERG WH-MOVEMENT

Op$_i$	[t_i	z-	jəč'ale](ABS)	[Op$_j$	t_j	daxew	
		WH.POSS-	boy			well	
wered	Ø-	qe-	zə-	ʔʷerer	]		
song	3ABS-	DIR-	WH.ERG-	sing.DYN.ABS			

ERG WH-AGREEMENT

DIRECT RELATIVIZATION:

* Op$_i$	[t_i	z-	jəč'ale](ERG)	daxew	wered(ABS)		
		WH.POSS-	boy	well	song		
Ø-	q-	ə-	ʔʷerer				
3ABS-	DIR-	3SG.ERG-	sing.DYN.ABS				

REGULAR φ-AGREEMENT

'the one whose son sings well'

Possessor of IO cannot be extracted

PSEUDOCLEFT REPAIR:

IO WH-MOVEMENT

ŝʷəzewᵢ	[t_i	zə-	qʷe](ABS)	[Op_j	t_j	č'elejeʁaǯer
woman		WH.POSS-	son			teacher.ABS
Ø-	z-	e-	ċeċaʁer			
3ABS-	WH.IO-	DAT-	scold.PST.ABS			

IO WH-AGREEMENT

DIRECT RELATIVIZATION:

* ŝʷəzewᵢ	[t_i	zə-	qʷe](IO)			č'elejeʁaǯer
woman		WH.POSS-	son			teacher.ABS
Ø-	Ø-	je-	ċeċaʁer			
3ABS-	3SG.IO-	DAT-	scold.PST.ABS			

REGULAR φ-AGREEMENT

'the woman whose son the teacher scolded'

Possessor of PP complement can be extracted!

Op$_i$	**[$_{PP}$**	t_i	**zjə-**wəne	dež' **]**	mezə-r	ʁerjeḳ^{w}e
			WH.POSS-house	at	forest-ABS	last year

Ø-**Ø-š'ə-**stəʁer

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

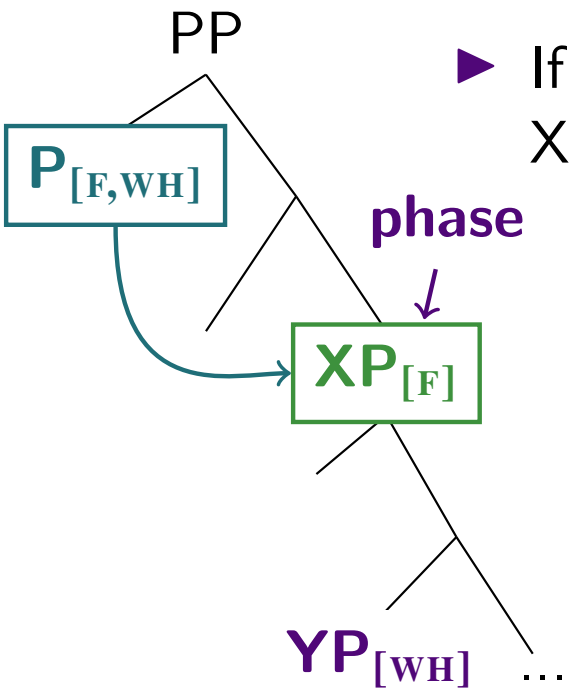
because the phase intervenes for Agree

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

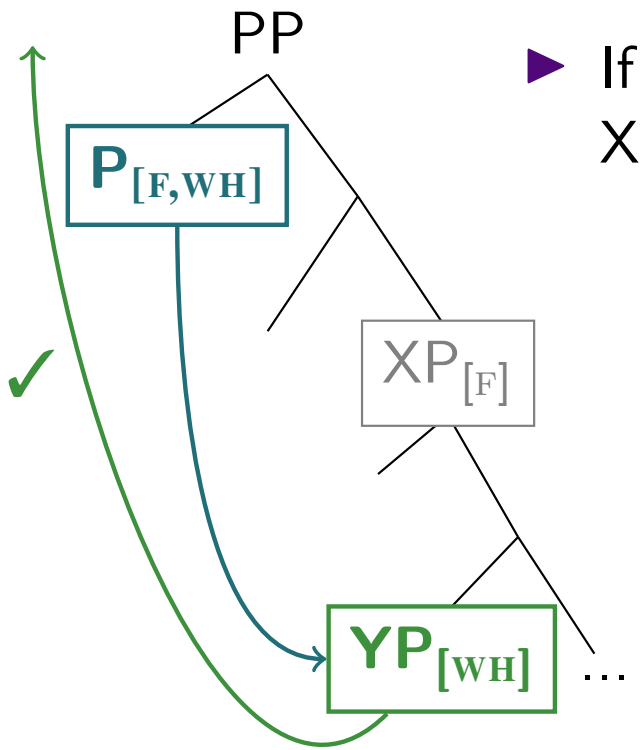


- All **phases** are potential **goals**
- If **P** independently agrees with phase **XP**, XP is no longer visible for P

  $\Rightarrow$ XP is no longer a phase

(Richards 1998; Rackowski and Richards 2005; van Urk and Richards 2015; Halpert 2019; Ershova 2024)

Prediction of Agree-based intervention



- All **phases** are potential **goals**
- If **P** independently agrees with phase **XP**, XP is no longer visible for P

  $\Rightarrow$ XP is no longer a phase

  - **P** can probe into **XP**.
  - **YP** inside phase **XP** is closest goal.
    $\Rightarrow$ **YP** skips phase edge.

(Richards 1998; Rackowski and Richards 2005; van Urk and Richards 2015; Halpert 2019; Ershova 2024)

Unlocking phases by Agree

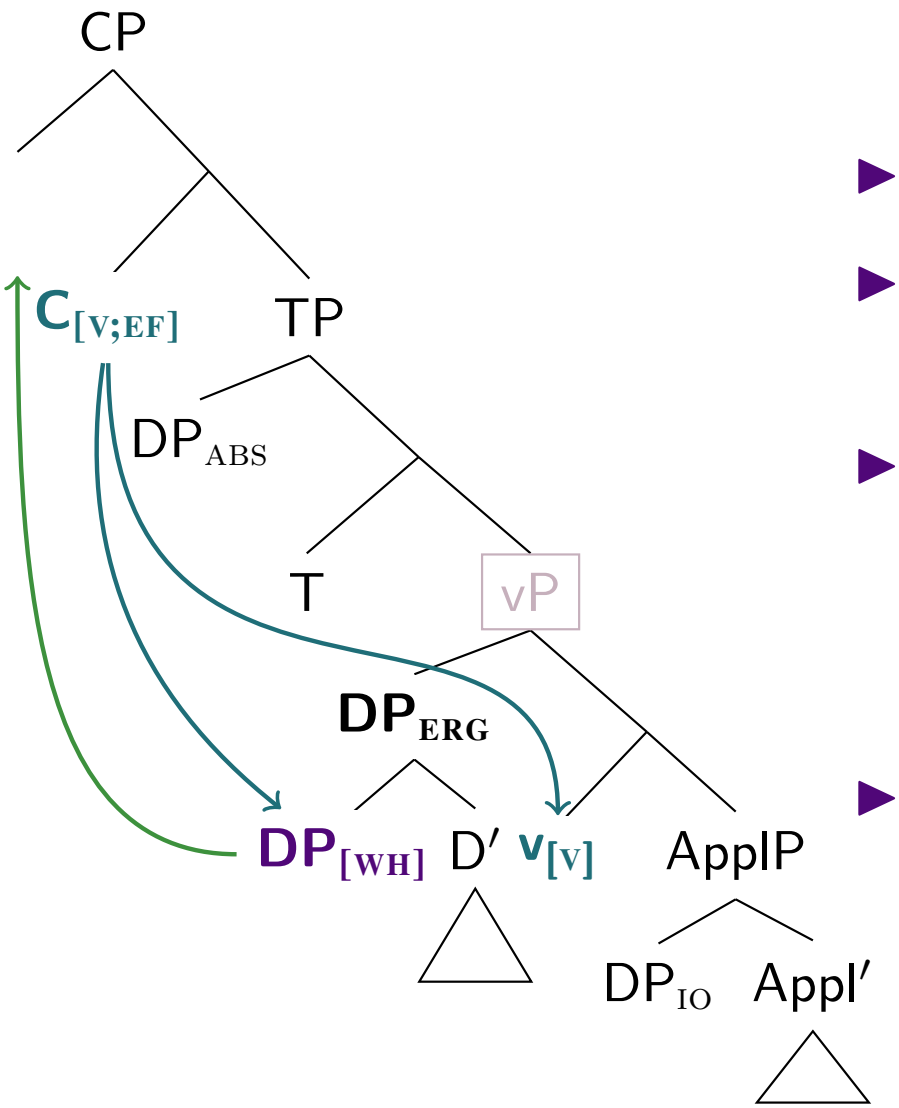
Prediction:

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

Confirmed by long-distance possessor extraction:

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

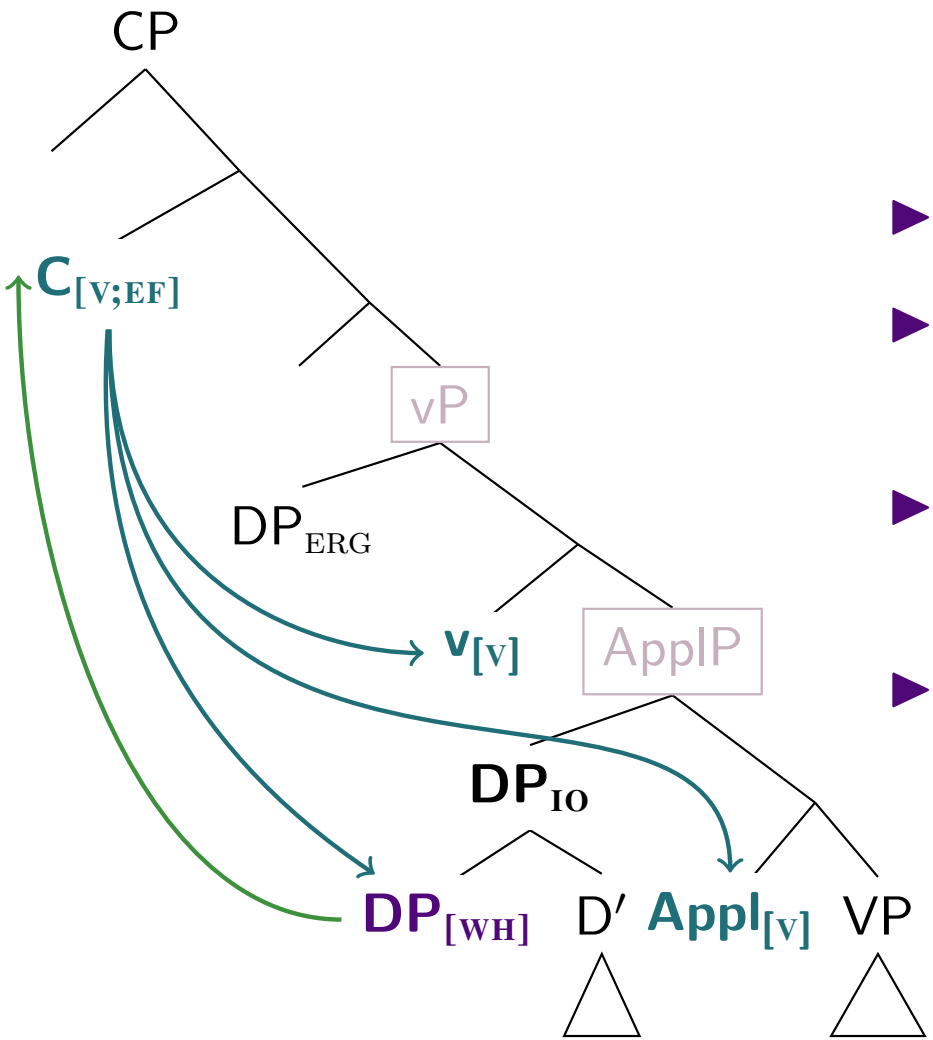
C agrees with v and Appl ⇒ possessors can move



- C agrees with v in $[\text{V}]$
- vP is no longer visible for C
  ⇒ vP is no longer a phase
- successive-cyclic movement triggered by edge feature $[\text{EF}]$

  (Chomsky 2008; Heck and Müller 2003; Müller 2010, 2011; Georgi 2014, 2017)
- $[\text{EF}]$ probes **after** $[\text{V}]$
  ⇒ C can probe into D_{ERG}
  possessor of ERG can move!

C agrees with v and Appl ⇒ possessors can move



- C agrees with v in [V]
- vP is no longer visible for C
  ⇒ vP is no longer a phase
- C agrees with Appl
  ⇒ ApplP is no longer a phase
- [EF] probes **after** [V]
  ⇒ C can probe into D_{IO}
  possessor of IO can move!

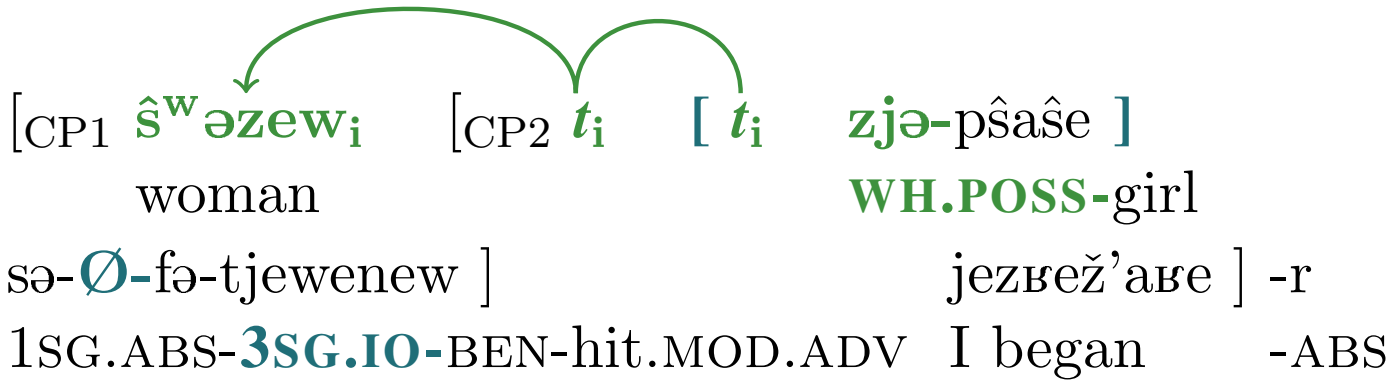
Long-distance relativization: possessor of ERG can move

[CP1 **Op$_i$** [CP2 t_i [t_i **zjə-**sabəj-xe-m] wered
WH.POSS-child-PL-OBL song
Ø-q-**a-**ʔʷenew] 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 2024)

Long-distance relativization: possessor of IO can move



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

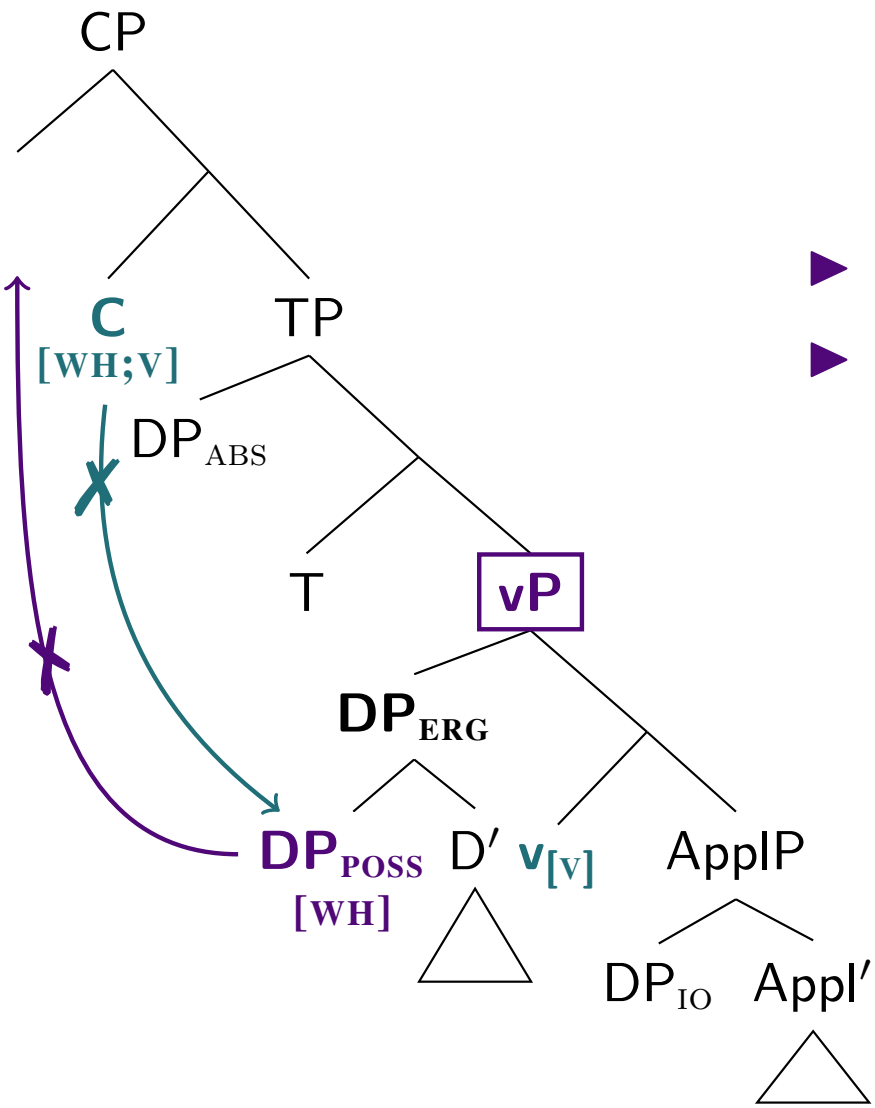
Why is short possessor relativization ungrammatical?

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 opaqueness ↔ 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.

Roadmap

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

Phases at the interface

Connection between phase opacity and spellout
$\Rightarrow$ 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 -[ʔaʂ̂ə -š'e] -fabe -r
    milk -[sweet -too] -warm -ABS

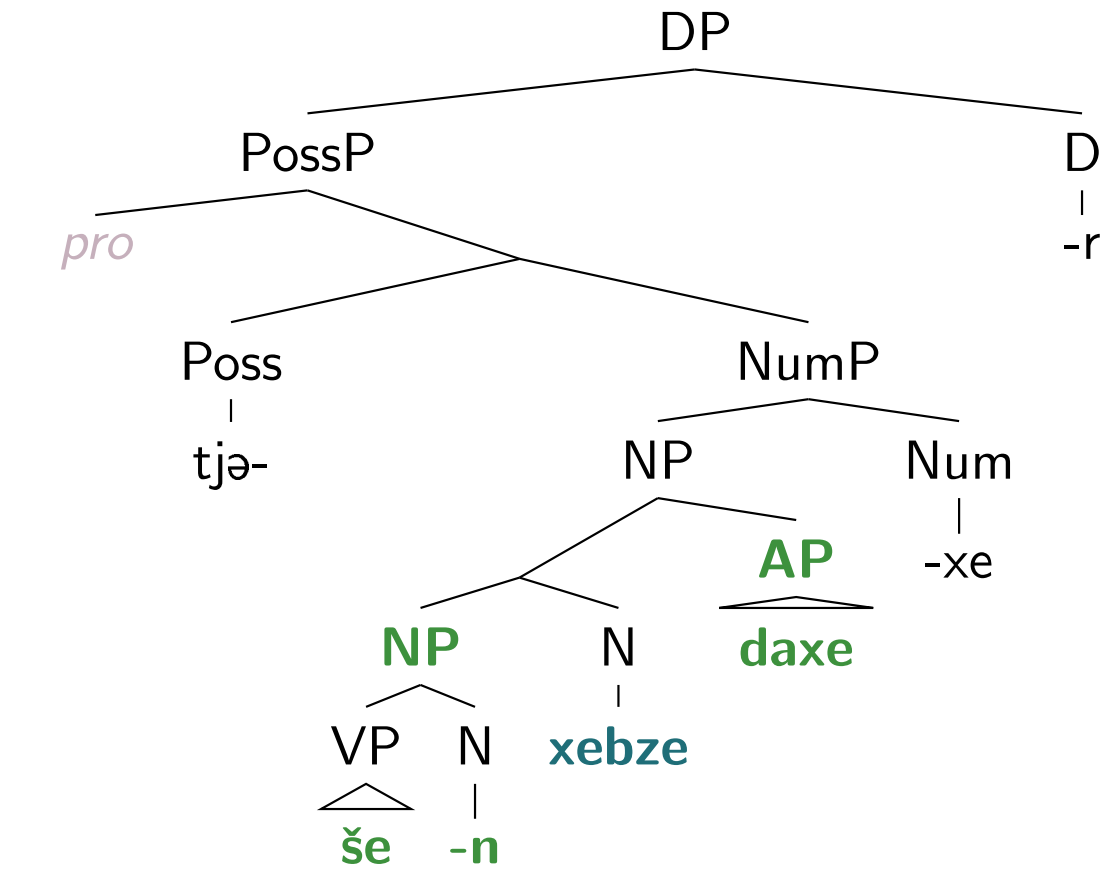
    'the warm milk that is too sweet' (Lander 2017:85)

  - may be phrasal

    [ɕ^{w}eqe- əč̣'jə- š'əʁən]- t^{w}əč̣'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 ≠ prosodic word

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

* sə/s- **leʁe**- thaǯ'ə -ʁ
1SG.ABS/ERG- **dish**- wash -PST

Expected: 'I washed dishes'

laʁe-xe-r Ø-s-thaǯ'ə-ʁe
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 AppIP: syntactic phases, not spellout domains

vP and AppIP are mapped to

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

$\Rightarrow$ mapping constraints cannot be relativized to vP and AppIP

vP and AppIP 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 ϕ-agreement
  → possessor ϕ-agreement

laʁe-xe-r	**Ø-**	**s-**	e-	thaǯ'ə	**FINITE**
dish-PL-ABS	**3ABS-**	**1SG.ERG-**	DYN-	wash	

'I am washing dishes.'

wjə-	leʁe-	thaǯ'ə	-ǯ'e	**NOMINALIZATION**
2SG.POSS-	dish-	wash	-NML	

'your manner of washing dishes'

v and Appl are present in nominalizations

- nominalizations include causatives

jə-	xebze-	**ʁe-**	kʲ̣ʷedə	-č̣’e
3SG.POSS-	rule-	**CAUS-**	perish	-NML

‘its destruction (= causing to perish) of traditions’

- nominalizations include applicatives

ja-	haẑʷə-	**de-**	ǯegʷə	-č̣’e
3PL.POSS-	puppy-	**COM-**	play	-NML

‘their way of playing with puppies’

Nominalizations include vP

External arguments are present, overtly or as PRO:

[**PRO$_{PL}$**	qə-	**ze-**	de-	ŝʷe-nə-r]	***pro*$_{SG}$**	səgʷrjehə
	DIR-	**REC-**	COM-	dance-NML-ABS		I like

lit. '**I$_{SG}$** like [**PRO$_{PL}$** dancing with each other].' (Ershova 2020:457)

Verbal structure in nominalizations

Nominalizations include vP and ApplP.

Evidence:

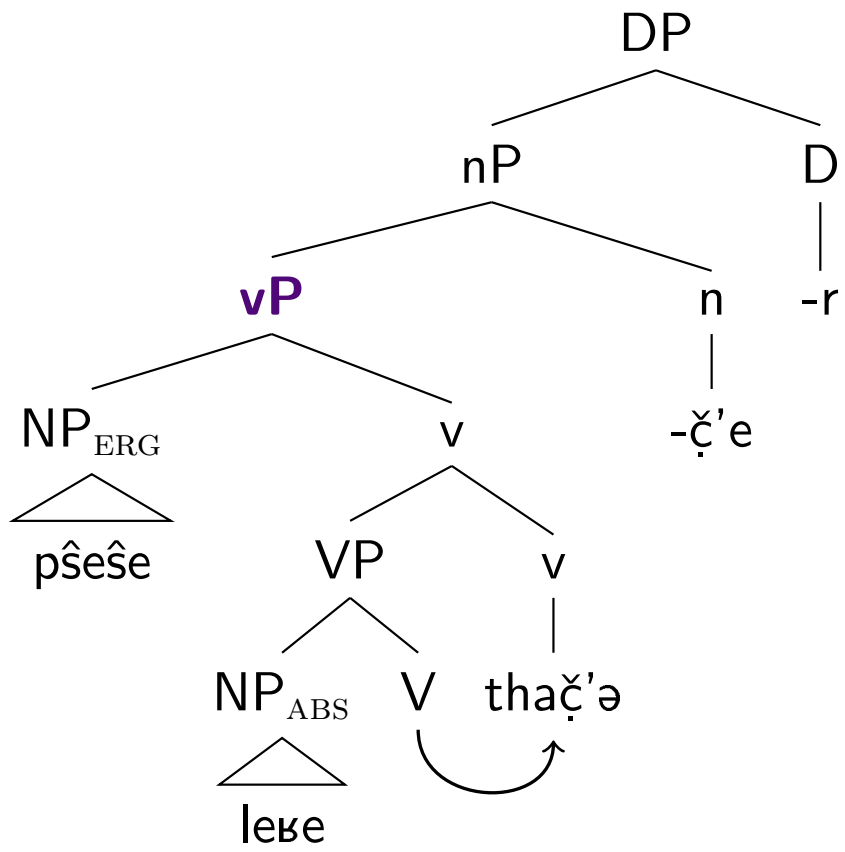
- causative and applicative morphology
- external argument is syntactically present

However: no verbal φ-agreement

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

← The same agreement unlocks vP and ApplP!

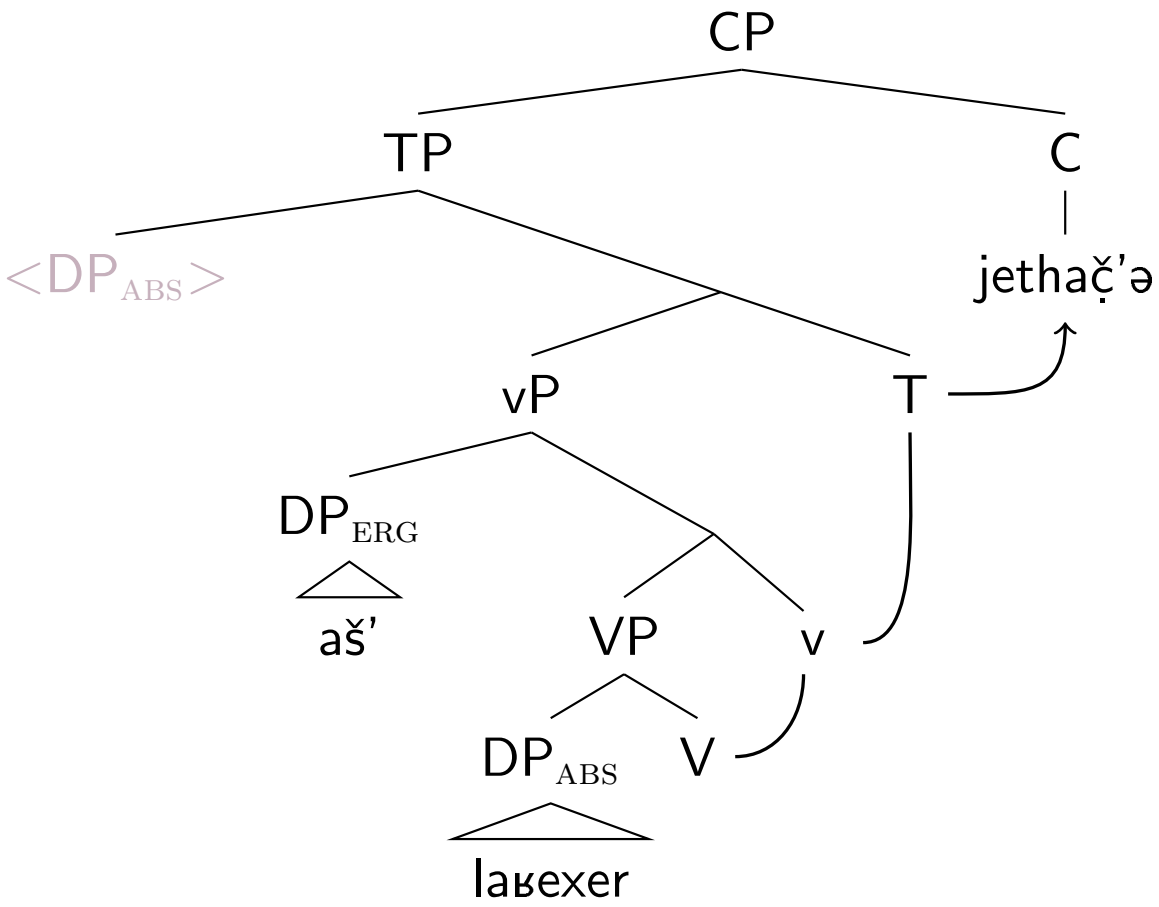
Nominalizations: vP is pronounced as part of one word



[vP pŝeŝe- leʁe- thač̣'ə] -č̣'e-r
girl- dish- wash -NML-ABS

'the girls' manner of dish-washing'

Finite clause: vP is mapped to multiple words



a-š' laʁe-xe-r j-e-thaǰ'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.

[DP wjə-	[vP leʁe-thaǰ'ə]	-ǰ'e			
2SG.POSS-	dish-wash	-NML			
	[CP kʷəxnjem	qebzenəʁə	jəλənew]]		
	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 $\not\Rightarrow$ XP is a prosodic domain

Roadmap

- 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, AppIP, 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 φ-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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Definitions

- **Closest** (modified from Rackowski and Richards 2005:579; my additions in **boldface**)
  A goal α is the closest one to a given probe if there is no distinct goal β such that for some **distinct** X (X a head or maximal projection), X c-commands **or dominates** α but does not c-command **or dominate** β.

- **Additional assumptions** (Rackowski and Richards 2005:582)
  - A probe must Agree with the **closest** goal α that **can move**.
  - A goal α **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 2024)