Contextually determined islandhood and constraints on possessor extraction in West Circassian[1]

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1 Introduction

West Circassian (or Adyghe; Northwest Caucasian):

- polysynthetic, with multiple verbal ϕ-probes and high degree of synthesis
- syntactically ergative: the absolutive argument moves to c-command the ergative agent (Ershova 2019, 2021a,d)

Possessor extraction is unusually constrained:

- ergative (ERG) and applied argument (IO) DPs are islands
- **only** with clausebound wh-movement

(1) $\quad C_{[WH]} \quad [_{DP}\ t_{POSS} \quad]_{\textbf{ERG/IO}} \cdots$ ✗

- long-distance wh-movement across a CP boundary allows for direct extraction

(2) ✓ $\quad C_{[WH]} \quad \cdots [_{\textbf{CP}} \quad [_{DP}\ t_{POSS} \quad]_{\textbf{ERG/IO}} \cdots$

⇒ Islandhood is contextually determined.

[1]Data for this project was collected through elicitation with speakers of the Temirgoy dialect in the Khatazhukaj rural settlement and Maykop (Adygea, Russia). The author is grateful to Svetlana K. Alishaeva, Saida Gisheva, Susana K. Khatkova, and Zarema Meretukova for sharing their language. A manuscript on this topic is in revision for resubmission; link to current version: `https://ling.auf.net/lingbuzz/005469`. The author thanks Karlos Arregi, Vera Gribanova, Boris Harizanov, participants of SMircle at Stanford, the audience at the UCSC S-Circle, three anonymous reviewers and the editor for helpful discussion and feedback. This work was funded by the NSF DDRIG #1749299. All mistakes and shortcomings are solely mine.

Unlike ERG and IO, absolutive (ABS) DPs and PPs are **not** islands:

- possessor extraction is grammatical from ABS

(3) ✓ $C_{[WH]}$ $[_{DP}\ t_{POSS}$ $]_{\mathbf{ABS}}$ ...

- possessor extraction is grammatical from PP

(4) ✓ $C_{[WH]}$ $[_{\mathbf{PP}}$ $[_{DP}\ t_{POSS}$] P] ...

⇒ **DP islandhood is sensitive to structural position.**

Main claim: islandhood of nominal arguments is best analyzed with a combination of:

- Agree-based theory of phasehood (Abels 2003; Rackowski & Richards 2005; Van Urk & Richards 2015; Halpert 2019)
- opacity of phase edges (= the Edge Condition[2]; Chomsky 2000, 2001)
- Combined via a revised definition of locality for Agree operations.

Phase opacity is a consequence of failure to Agree with the phase head, i.e. phasehood is variable and contextually determined.[3]

Phasehood of a constituent is the result of syntactic intervention for Agree, not transfer to the interfaces; cf. Chomsky (2000, 2001, 2008); Richards (2011); Bošković (2016), a.o.

The Edge Condition is accounted for via locality and intervention, not constraints on computational complexity; cf. Chomsky (2008:147-148).

The analysis in a nutshell:

- Wh-movement out of a phase is possible if that phase has independently entered Agree with the wh-movement triggering head (C^0) ***prior*** to wh-probing.
- Otherwise, the phase and its edge are opaque for subextraction.
- Ergative and applied argument DPs are merged and licensed at phase edges: Spec,vP and Spec,ApplP; the absolutive argument and PPs are not.

[2]Term coined by Gallego & Uriagereka (2007), but they do not ultimately endorse this as a standalone constraint on extraction.

[3]The idea of dynamic phasehood, although different in assumptions and implementation, has been proposed by den Dikken (2007); Gallego (2010); Bošković (2014).

- Contrast between matrix and embedded clauses:
  - polypersonal agreement and polysynthetic word-formation are licensed by Agree with C^0
  - the wh-feature on matrix C^0 probes ***prior*** to the polysynthetic agreement feature, triggering an intervention effect
    $\Rightarrow$ phase edges are opaque for subextraction
  - in long-distance wh-movement, successive-cyclic movement to embedded Spec,CP is triggered as a last resort ***after*** the polysynthetic agreement feature
    $\Rightarrow$ the lower phase heads do not trigger an intervention effect

Roadmap:

2 Background on West Circassian wh-movement

3 Constraints on possessor extraction

4 The analysis: Agree-based phasehood

5 Conclusion

2 Background on West Circassian wh-movement

2.1 Basic clause structure

- polysynthesis (Kumakhov 1964; Kumakhov & Vamling 2009; Testelets 2009; Korotkova & Lander 2010; Lander & Letuchiy 2010; Lander 2017; Lander & Testelets 2017, *inter alia*):

  (5) **sə-** qə- **p-** **f-** **a-** **r-** **jə-** ʁe- λeʁʷə -ʁ
  1SG.ABS- DIR- 2SG.IO- BEN- 3PL.IO- DAT- 3SG.ERG- CAUS- see -PST
  'He showed me to them for your sake.' (Korotkova & Lander 2010:301)

- ergativity in verbal indexing

  (6) | **Absolutive-** | **Applied object-** **Applicative-** | **Ergative-** |

- possessors are cross-referenced on the noun:

  (7) **s**-šəpχ^{w}əxer
  1SG.PR-sister.PL.ABS
  'my sisters'

  (8) **t-jə-**ʁ^{w}əneʁ^{w}əxem
  1PL.PR-POSS-neighbor.PL.OBL
  'our neighbors'

- ergativity in case marking

  absolutive *-r*: subject of intransitive verb (9a)
  theme of transitive verb (9b)
  oblique *-m*: agent of transitive verb (9b)
  applied objects (9c)
  possessors (9d)
  complements of postpositions (9e)

  (9) a. mə pŝaŝe-**r(ABS)** jane paje Ø-qaŝ^{w}e
  this girl-**ABS** 3PL.PR+mother for 3ABS-dance
  'The girl is dancing for her mother.'

  b. sjəpŝaŝexe-**m(ERG)** nəsχapexe-**r(ABS)**
  1SG.PR.girl.PL-**OBL** doll.PL-**ABS**
  Ø-a-fepaʁex
  3ABS-3PL.ERG-dress.PST.PL
  'My daughters dressed the dolls.'

  c. mə č̣'ale-r(ABS) bere jəʔahəlxe-**m(IO)** telefonč̣'e
  this boy-ABS much 3SG.PR.relative.PL-**OBL** telephone.INS
  Ø-a-fe-tjewe
  3ABS-3PL.IO-BEN-hit.PRES
  'This boy calls (lit. rings for) his relatives on the telephone a lot.'

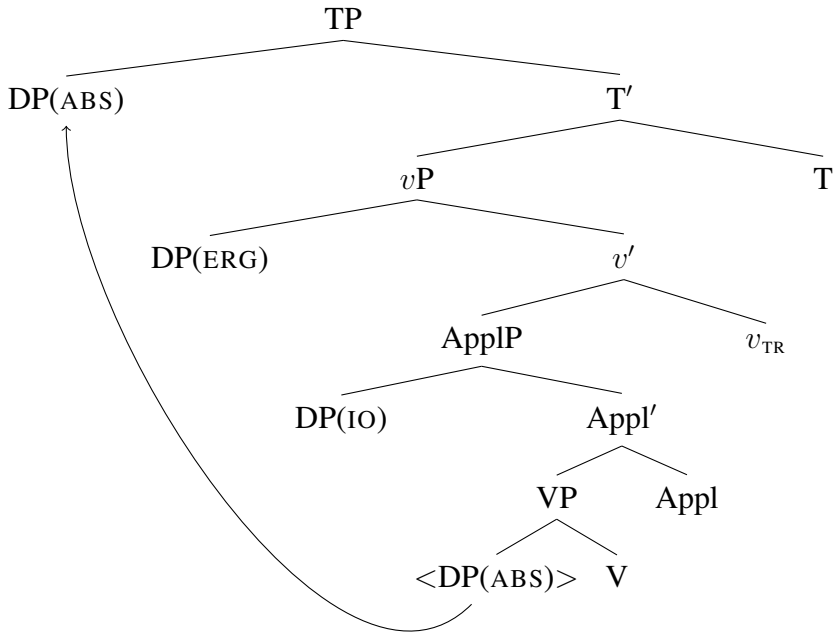
  d. pŝaŝe-**m** Ø-jə-pŝeŝeʁ^{w}
  girl-**OBL** 3SG.PR-POSS-female.friend
  'the girl's friend'

  e. mə ŝ^{w}əzə-**m** paje
  this woman-**OBL** for
  'for this woman'

- Indefinite nouns, possessed nouns in the singular, proper names and personal pronouns are generally unmarked for case (Arkadiev et al. 2009:51-52; Arkadiev & Testelets 2019).

- West Circassian is a high absolutive language, based on anaphor binding and parasitic gaps (Ershova 2019, 2021a,d)

(10)



2.2 Relative clauses

Per Lander (2009a,b, 2012); Caponigro & Polinsky (2011); Ershova (2021a)

Relativization is the only type of wh-movement.

(11) **General structure of relative clauses (Caponigro & Polinsky 2011):**

$[_{CP}\ Op_i\ C[WH]\ [_{TP}\ \ldots\ t_i\ \ldots\ ]\ ]$

ϕ-agreement referring to the relativized participant replaced by **wh-agreement** (Caponigro & Polinsky 2011; see also O'Herin 2002; Baier 2018 on Abaza):

z(ə)- = ergative agents, applied objects, and possessors

Ø- = absolutive arguments

Ergative agent:

(12) a. **mə č̣'ale-m$_i$(ERG)** ə-š velosjəped
this boy-OBL 3SG.PR-brother bicycle
Ø- Ø- r- **jə-** tə -ʁ
3ABS- 3SG.IO- DAT- **3SG.ERG**- give -PST
'This boy gave a bicycle to his brother.'

b. marə č̣'al-ew [$_{RC}$ Op$_i$ t_i(ERG) ə-š velosjəped
here boy-ADV 3SG.PR-brother bicycle
Ø- Ø- je- **zə-** tə -ʁe] -r
3ABS- 3SG.IO- DAT- **WH.ERG**- give -PST -ABS
'Here is the boy that gave a bicycle to his brother.'

Possessor:

(13) marə ŝ^{w}əz-ew [$_{RC}$ Op$_i$ [$_{DP}$ t_i(PR) **z**-jə-pŝaŝe] dax-ew
here woman-ADV **WH.PR**-POSS-girl good-ADV
Ø-qa-ŝ^{w}e-re] -r
3ABS-DIR-dance-PRES -ABS
'Here is the woman whose daughter dances well.'

Absolutive argument:

(14) a. **ha-r** Ø-jə-xozjajən **Ø-** Ø- je- ceqa -ʁ
dog-ABS 3SG.PR-POSS-owner **3ABS**- 3SG.IO- DAT- bite -PST
'The dog bit its owner.'

b. se səš'eš'əne ha-w [$_{RC}$ Op$_i$ t_i(ABS) Ø-jə-xozjajən
I fear dog-ADV 3SG.PR-POSS-owner
Ø- Ø- je- ceqa -ʁe] -m
WH.ABS- 3SG.IO- DAT- bite -PST -OBL
'I fear the dog that bit its owner.'

- **Nominal head** (i) appears to the left of relative clause with *-ew* (ADV) case marking; (ii) to the right with regular case marking; (iii) is null (in headless relative clauses).

Nominal head to the right of the relative clause:

(15) [$_{RC}$ Op$_i$ t_i(ERG) Ø-jə-ŝhanʁ^{w}ənče Ø- xe- **zə-** wətə -ʁe]
3SG.PR-POSS-window 3ABS- LOC- **WH.ERG**- break -PST
č̣'ale-r marə
boy-ABS here
'Here is the boy that broke his window.'

Headless relative clause:

(16) [$_{RC}$ Op$_i$ asλan t_i(IO) Ø- **zə-** fae -zepətə] -m
Aslan 3ABS- **WH.IO**- want -HABIT -OBL
ə-š-xe-r fajep
3SG.PR-brother-PL-ABS don't want
'[What Aslan always wants] his brothers don't want.'

Syntax of relative clauses, per O'Herin (2002) on Abaza, Caponigro & Polinsky (2011); Ershova (2021a) on West Circassian:

- Relativization of all types of arguments involves wh-movement and wh-agreement: Ø- for absolutive and *zə-* for all other arguments.[4]
- There is no overt relative pronoun, i.e. the wh-movement is covert and can be diagnosed by (i) islandhood sensitivity and (ii) the ability of the moved operator to license parasitic gaps (see Appendix A)

3 Constraints on possessor extraction

Summary of the data:[5]

- ergative and applied arguments are islands for clausebound possessor extraction
- the islandhood of ERG and IO DPs is ameliorated in long-distance wh-movement configurations
- absolutive DPs and PPs are not islands

3.1 Clausebound possessor extraction

- Possessor extraction is the only type of productive wh-movement from within nominal constituents.
- Generalization for clause-bound wh-movement:

(17) **CONSTRAINT ON POSSESSOR EXTRACTION (PREMILINARY)**. Ergative and applied argument DPs are islands for subextraction; absolutive DPs and PPs are not.

[4]See Lander (2009a,b, 2012); Lander & Daniel (2020) for an alternative analysis of *zə-* as a morphologically expressed relative or resumptive pronoun.

[5]The constraints outlined here are subject to dialectal variation. E.g. the majority of speakers Lander (2012) consulted allow possessor extraction from all types of arguments, and a small set of speakers disallow possessor extraction from non-absolutive arguments. The speakers that I consulted for this project uniformly disallow possessor extraction from non-absolutive arguments; see conclusion for account of variation.

***possessor extraction from ergative external argument (→ pseudocleft repair)**[6]

(18) a. [mə bzəλfəʁe-m(PR) **Ø-**jə-ç̣'ale](ERG) dax-ew wered(ABS)
this woman-OBL **3SG.PR-**POSS-boy beautiful-ADV song
Ø-q-j-e-ʔʷe
3ABS-DIR-3SG.ERG-PRES-sing
'This woman's son sings well.'

b. * xet-a [Op$_i$ [t_i(PR) **z-**jə-ç̣'ale](ERG) dax-ew
who-Q **WH.PR-**POSS-boy beautiful-ADV
wered(ABS) Ø-q-ə-ʔʷe-re] -r
song 3ABS-DIR-3SG.ERG-sing-PRES -ABS
Intended: 'Whose son sings well?'

c. xet-a [Op$_i$ [t_i(PR) **z-**jə-ç̣'ale](ABS) [$_{RC}$ Op$_i$ t_j(ERG)
who-Q **WH.PR-**POSS-boy
wered(ABS) Ø-qe-**zə-**ʔʷe-re-r]]
sing 3ABS-DIR-**WH.ERG-**sing-PRES-ABS
'Whose son sings well. (lit. Whose son is the one who sings well?)'

***possessor extraction out of applied argument**[7]

(19) a. [mwe ŝʷəzə-m(PR) **ə-**qʷe](IO) ç̣'elejeʁaǯe-r(ABS)
this woman-OBL **WH.PR-**son teacher-ABS
Ø-Ø-je-ç̣eç̣a-ʁ
3ABS-3SG.IO-DAT-scold-PST
'The teacher scolded this woman's son.'

b. * mwarə [$_{RC}$ ŝʷəz-ew$_i$ [t_i(PR) **zə-**qʷe](IO) ç̣'elejeʁaǯe-r(ABS)
here woman-ADV **WH.PR-**son teacher-ABS
Ø-Ø-je-ç̣eç̣a-ʁe] -r
3ABS-3SG.IO-DAT-scold-PST -ABS
Intended: 'Here is the woman whose son the teacher scolded.'

c. mwarə [$_{RC}$ ŝʷəz-ew$_i$ [t_i(PR) **zə-**qʷe](ABS) [$_{RC}$ Op$_j$ t_j(IO)
here woman-ADV **WH.PR-**son
ç̣'elejeʁaǯe-r(ABS) Ø-**z-**e-ç̣eç̣a-ʁe-r]]
teacher-ABS 3ABS-**WH.IO-**DAT-scold-PST-ABS
lit. 'Here is the woman whose son is the one whom the teacher scolded.'

[6]See Ershova (2021a,c) for evidence that this is a pseudocleft.
[7]See Appendix B for other types of applied arguments.

✓ possessor extraction from absolutive external argument

(20) marə ŝʷəz-ew [$_{RC}$ Op$_i$ [$_{DP}$ t_i(PR) **z**-jə-pŝaŝe] dax-ew
here woman-ADV **WH.PR**-POSS-girl good-ADV
Ø-qa-ŝʷe-re] -r
3ABS-DIR-dance-PRES -ABS
'Here is the woman whose daughter dances well.'

✓ possessor extraction from absolutive internal argument

(21) mwarə [$_{RC}$ ŝʷəz-ew$_i$ [$_{DP}$ t_i(PR) **zə-**qʷe](ABS) hapse-m
here woman-ADV **WH.PR-**son prison-OBL
Ø-Ø-č̣-a-ʒa-ʁe] -r
3ABS-3IO.SG-LOC-3PL.ERG-throw-PST -ABS
'Here is the woman whose son they threw in jail.'

✓ possessor extraction from PP

(22) mə pŝeŝe-ẑəje-r arə [$_{RC}$ Op$_i$ [$_{PP}$ [$_{DP}$ t_i(PR) **z-**jane] paje]
this girl-small-ABS PRED **WH.PR-**mother for
haləʁʷ Ø-b-ʁe-ž'a-ʁe] -r
bread 3ABS-2SG.ERG-CAUS-boil-PST -ABS
'This is the girl for whose mother you baked some bread.'

3.2 Long-distance possessor extraction

Based on long-distance wh-movement, revised generalization on possessor extraction:

(23) **CONSTRAINT ON POSSESSOR EXTRACTION (FINAL)**. Ergative and applied argument DPs are islands if they appear within the same clause (CP) as the wh-movement triggering C^0.

Example of (non-possessor) long-distance wh-movement:

(24) xet-a [$_{RC}$ Op$_i$ we [$_{CP}$ t_i(IO) wə-**z**-š'ə-tχʷə-n-ew]
who-Q you 2SG.ABS-**WH.IO**-LOC-praise-MOD-ADV
Ø-je-b-ʁe-ž'a-ʁe] -r
3ABS-DAT-2SG.ERG-CAUS-begin-PST -ABS
'Who did you begin to praise?'

✓ long-distance wh-movement from ergative external argument (→ no islandhood effect)

(25) xet-a [$_{RC}$ Op$_i$ [$_{CP}$ [$_{DP}$ t_i(PR) **z-**jə-sabəj-xe-m](ERG) wered(ABS)
who-Q **WH.PR-**POSS-child-PL-OBL song
Ø-q-a-ʔ^{w}e-n-ew] Ø-wə-mə-de-re] -r
3ABS-DIR-3PL.ERG-say-MOD-ADV 3ABS-2SG.ERG-NEG-consent-PRES -ABS
lit. 'Whose did you not consent for _ children to sing?'

✓ long-distance wh-movement from applied argument (→ no islandhood effect)

(26) marə [$_{RC}$ ŝ^{w}əz-ew$_i$ [$_{CP}$ [$_{DP}$ t_i(PR) **z-**jə-pŝaŝe](IO)
here woman-ADV **WH.PR-**POSS-girl
sə-Ø-fə-tje-we-n-ew]
1SG.ABS-3SG.IO-BEN-LOC-hit-MOD-ADV
Ø-je-z-ʁe-ž'a-ʁe] -r
3ABS-DAT-3SG.ERG-CAUS-begin-PST -ABS
lit. 'Here is the woman whose I began to call _ daughter.'

Summary:

- Ergative and applied argument DPs are islands for clausebound possessor extraction, but not in long-distance movement configurations.
- Absolutive DPs and PPs are not islands for subextraction.

4 Agree-based phasehood, locality, and the Edge Condition

The proposal:

Selective DP islandhood effects in West Circassian provide evidence for an Agree-based model of syntactic domains and phase boundaries (Abels 2003; Rackowski & Richards 2005; Van Urk & Richards 2015; Halpert 2019):

- Islandhood of DP_{ERG} and DP_{IO} depends on agreement properties of C^0 and the heads that select for the corresponding arguments: v^0 and $Appl^0$ respectively.
- v^0 and $Appl^0$ are phase heads; DP_{ERG} and DP_{IO} are merged at the phase edges.
- The internal contents of the phase edge are opaque for syntactic operations per Chomsky (2008).

- If v^0 and Appl^0 have successfully agreed with wh-movement triggering C^0, they do not behave as phases and their phase edge is correspondingly accessible for subextraction.

Existing analyses of selective DP islandhood cannot account for West Circassian data:

- islandhood as a result of subjacency violations = too many phase boundaries crossed (Chomsky 1973 *et seq.*).
- islandhood connected to ungoverned (specifier) status of DP (Huang 1982; Takahashi 1994; Stepanov 2001)
- moved DPs are islands (Boeckx 2003; Bošković 2018)
- DPs that have been agreed with are islands (Gallego & Uriagereka 2007; Gallego 2010)
- DPs that have not been agreed with are islands (Branan 2018)
- non-absolutive DPs are structurally larger than absolutive DP (= PPs); cf. Polinsky (2016)

Each of these approaches faces problems in accounting for the basic contrast: ABS DPs and PPs versus ERG and IO DPs; see Ershova (2021c).

More importantly: Cannot explain lack of islandhood effect with long-distance wh-movement from embedded CP.

*Embedded and matrix CPs are structurally identical: no difference in argument licensing, case or agreement properties.

4.1 Agree-based phasehood and intervention

Rackowski & Richards's (2005) Agree-based phasehood:

- Phases may be made transparent for subextraction if they enter an independent agreement relation with the head that attracts the extracted element.
- All and only phases may undergo syntactic movement, per Chomsky (2000, 2001).
- $\Rightarrow$ For any movement-triggering operation, any phase acts as a potential goal.
- Per standard locality constraints, only the *closest* goal may successfully satisfy the feature on the movement probe.

- If the closest goal cannot satisfy the feature on the movement probe, defective intervention is triggered, resulting in ungrammaticality.[8]
- Theoretical assumptions from Rackowski & Richards (2005:582):

(27) a. A probe must Agree with the *closest* goal α that *can move*.

b. A goal α *can move* if it is a phase.

c. 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).

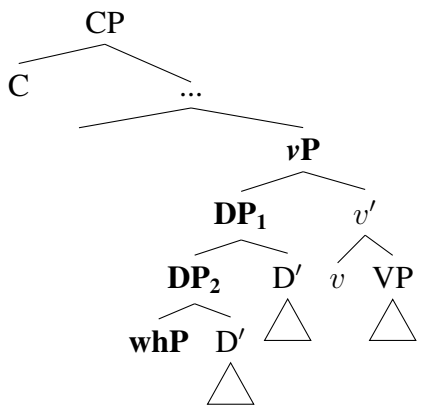
My additions to Rackowski & Richards (2005):

- To capture the Edge Condition:

(28) **Modified definition of *closest* from Rackowski & Richards (2005:579); my addition is 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.

E.g. if vP is a phase, only DP1 in Spec,vP can undergo movement; any constituent embedded within DP1 (e.g. DP2 or whP) is inaccessible for extraction:

(29)



- Two types of probe features (Heck & Müller 2007; Müller 2010, a.o.):

Agree	∗F∗	trigger agreement without movement
Structure-building	•F•	trigger external or internal Merge

[8]Only in the case of an unsatisfied movement feature; failed agree that does not require movement does not necessarily result in ungrammaticality (Preminger 2014).

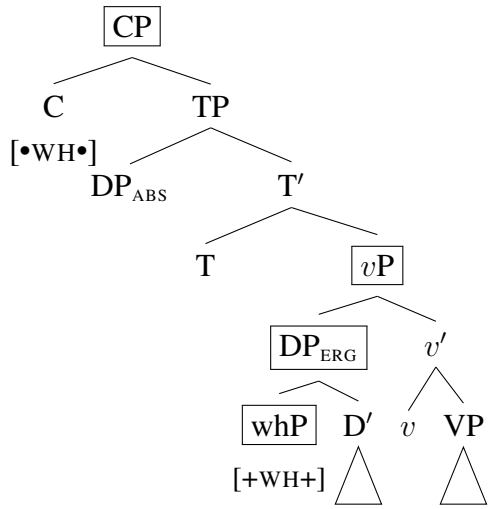
- Probe features are hierarchically ordered and only the highest feature in the hierarchy is visible for syntactic operations per Georgi & Müller (2010); Müller (2010); Martinović (2015); Ershova (2019).
- Goal features may be specified as 'movement-type' (labeled here as +F+): they must be checked by a structure-building feature.
- For successive cyclic A′-movement through phase edges (see e.g. Chomsky 2000, 2001, 2008):

  At the time a phase is formed, a structure-building edge feature (•+•) may be added to the phase head to trigger movement of the corresponding goal to the phase edge.

  This edge feature is inserted *after* all other featural requirements of the phase head are satisfied, per Chomsky (2008) and counter to Heck & Müller (2003); Müller (2010, 2011).
- CP, vP, ApplP, and DP are phases (Chomsky 2000, 2001; Legate 2003; McGinnis 2000, 2001, a.o.)

***possessor extraction from ergative DP:**

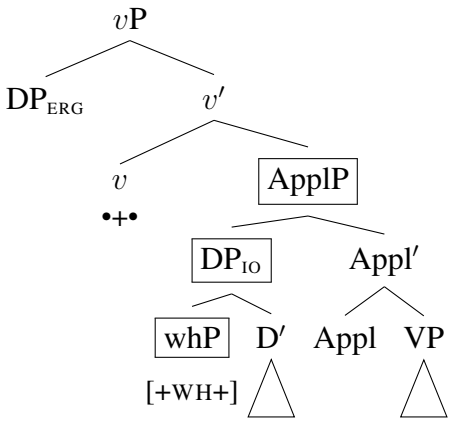
(30)



- C^0 probes with the [•WH•] feature, and the possessor within the ergative DP bears the matching [+WH+] feature.
- There are two eligible goals for C^0: the vP phase and the DP at the edge of this phase.
- vP and DP cannot move because this requires pied-piping ([+WH+] is embedded), which is disallowed in West Circassian.
- The possessor in DP_{ERG} is not an eligible goal: vP is an intervener.
- ⇒ The possessor is trapped within the ergative DP.

***possessor extraction from applied argument:**

(31)

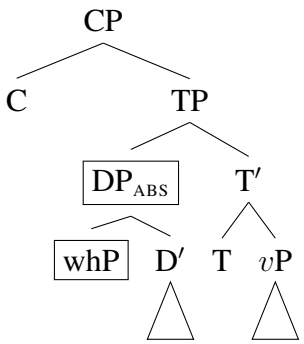


- Movement of possessor from DP_{IO} must pass through Spec,vP (a phase edge).
- Movement to Spec,vP is triggered by the successive cyclic edge feature [•+•].
- ApplP is an intervener for the movement of the possessor from DP_{IO}.
- $\Rightarrow$ the possessor is trapped, triggering an islandhood effect.

✓ possessor extraction from absolutive DP:

no phase boundaries between DP_{ABS} and C^0.

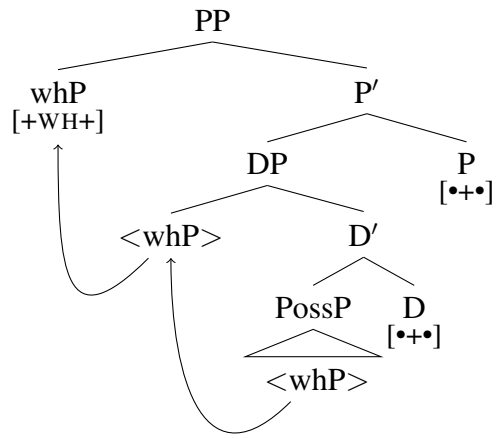
(32)



✓ **possessor extraction from PP**:

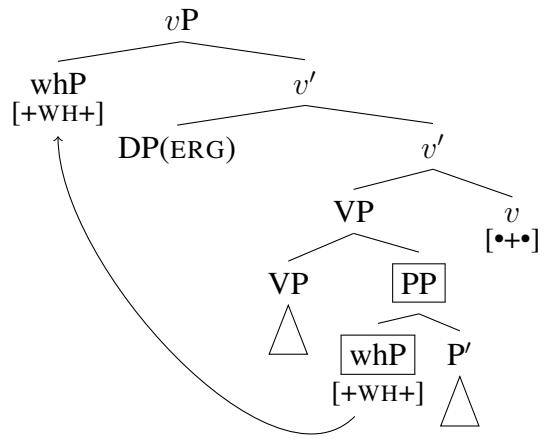
- possessor moves to edge of DP and PP via edge feature

(33)



- PP is not at phase edge → accessible for probing by v^0
- ⇒ possessor may be extracted from PP

(34)



Summary so far: Agree-based phasehood + Edge Condition can explain basic contrast between ERG and IO DPs and ABS DPs and PPs

Upcoming: Evidence for phasehood as intervention for Agree – no islandhood effect if phase successfully agrees.

4.2 Unlocking phases via polysynthesis and the edge feature

The puzzle: Why are ergative and applied argument DPs transparent for subextraction in long-distance wh-movement configurations?

(35) xet-a [$_{RC}$ Op$_i$ [$_{CP}$ [$_{DP}$ t_i(PR) **z-**jə-sabəj-xe-m](ERG) wered(ABS)
who-Q **WH.PR-**POSS-child-PL-OBL song
Ø-q-a-ʔ^{w}e-n-ew] Ø-wə-mə-de-re] -r
3ABS-DIR-3PL.ERG-say-MOD-ADV 3ABS-2SG.ERG-NEG-consent-PRES -ABS
lit. 'Whose did you not consent for _ children to sing?'
✓ long-distance possessor extraction from ergative DP

Rackowski & Richards (2005): in Tagalog agreement between v^0 and direct object unlocks direct object CP for subextraction.

My proposal: In West Circassian, agreement between C^0 and lower verbal phase heads (v^0 and Appl^0) unlocks vP and ApplP (and, correspondingly, their edges) for subextraction.

- Agreement between C^0, v^0 and Appl^0 is connected to polysynthetic morphology.
- Head movement to C^0 is triggered by agreement in the feature [V]:
  - C^0 has the agreement feature [$*$V$*$]
  - all other verbal projections bear the corresponding goal feature [V]
  - See e.g. Roberts (2010) for Agree-driven head movement and Biberauer et al. (2014) on applying this approach to polysynthetic languages.[9]
  - C^0 agrees with all verbal projections in its c-command domain via Multiple Agree (Hiraiwa 2001, 2005; Zeijlstra 2004; Nevins 2007, 2011).

(36) [$_{CP}$ C$_{[*V*]}$ [$_{TP}$ T$_{[V]}$ [$_{vP}$ $v_{[V]}$ [$_{ApplP}$ Appl$_{[V]}$ [$_{VP}$ V$_{[V]}$ ...

$\Rightarrow$ complex head: C+T+v+Appl+V

- See Ershova (2021b) on licensing polypersonal agreement on v^0 and Appl^0 via agreement with C^0.

[9]This analysis requires placing concatenative head movement in the narrow syntax per e.g. Koopman (1984); Travis (1984); Baker (1988); Kayne (1994); Roberts (2010); Arregi & Pietraszko (2021) and counter to e.g. (Chomsky 2001; Embick & Noyer 2001; Harizanov & Gribanova 2019). See Roberts (2010) on differentiating Agree-driven phrase and head movement.

Why are there no DP islandhood effects in embedded clauses?

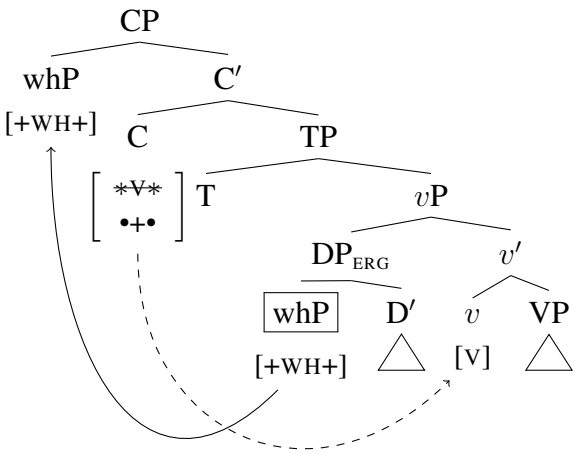
A combination of two factors:

1. the presence of the agreement feature [∗V∗] on embedded C^0
2. the absence of the wh-movement triggering feature [•WH•] on embedded C^0 (the [•WH•] feature is on matrix C^0)

✓ long-distance possessor extraction from ergative DP

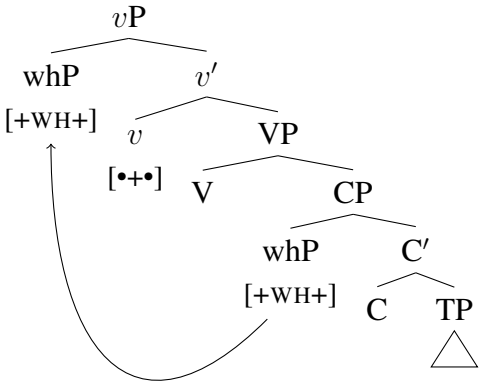
- Embedded C^0 agrees with v^0
- vP is transparent for further probing by C^0
- C^0 attracts whP with edge feature [+F+]

(37)



- whP moves from embedded Spec,CP to Spec,vP via successive cyclic movement
- Spec,vP is an eligible goal for [•WH•] on matrix C^0

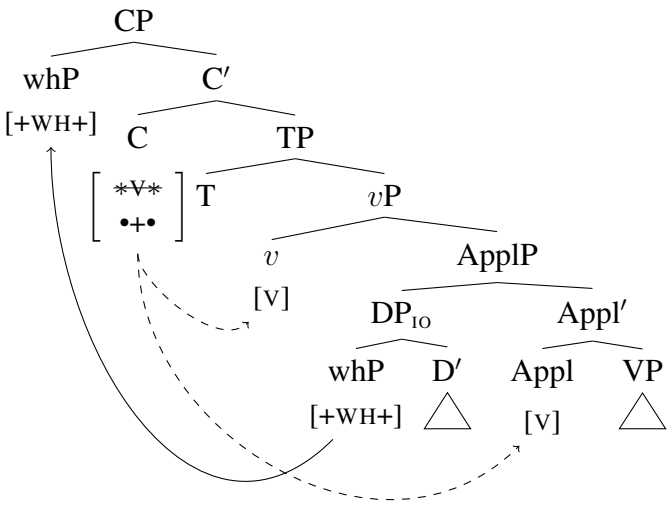
(38)



✓long-distance possessor movement from applied argument

- embedded C^0 agrees in [V] with v, and subsequently $Appl^0$
- whP within applied argument is attracted to embedded Spec,CP with edge feature [•+•]

(39)



Difference with clausebound extraction:

- matrix C^0 also hosts the [∗V∗] feature
- but matrix C^0 also hosts [•WH•], which probes ***prior*** to [∗V∗]
- ⇒ intervention effect with lower phase heads

5 Conclusion

- West Circassian DP arguments display a puzzling combination of syntactic effects: ergative and applied argument DPs are islands for extraction, but only when they are clausemates of the wh-movement triggering head (C^0).
- A DP becomes an island if merged at a phase edge, rendering the internal structure of the corresponding DPs opaque for subextraction.
- The amelioration of the islandhood effects in embedded contexts provides evidence of an **agree-based model of phasehood**, where phases behave as opaque domains due to them serving as interveners for the probe in question.
- The unusual dynamic/selective DP islandhood is **connected to polysynthesis**: C^0 agrees with all the lower heads in the verbal extended projection, triggering head movement to C^0 and resulting in a morphologically complex predicate.

- As a polysynthetic language, West Circassian presents novel evidence for an Agree-based theory of phasehood, per Rackowski & Richards (2005); Van Urk & Richards (2015); Halpert (2019).
- Constraints on possessor extraction are an unconventional **syntactic ergativity effect**: ERG is an island for subextraction, but ABS is not.

Appendices

A Diagnosing covert wh-movement

Wh-movement is island sensitive:

(40) a. [$_{RC}$ Op$_i$ wəne(ABS) t_i(ERG) Ø- qə- s- fe- **zə-** ŝe
house 3ABS- DIR- 1SG.IO- BEN- **WH.ERG-** do
-ʁe] blaʁe-r sa-pe Ø-q-Ø-jə-fa-ʁ
-PST relative-ABS 1SG.PP-front 3ABS-DIR-3SG.IO-LOC-fall-PST
'I met the relative who built a house for me.'

b. * səd-a [$_{RC}$ Op$_j$ [$_{RC}$ Op$_i$ t_j(ABS) t_i(ERG) Ø- qə- s- fe-
what-Q 3ABS- DIR- 1SG.IO- BEN-
zə- ŝe -ʁe] blaʁe-r sa-pe
WH.ERG- do -PST relative-ABS 1SG.PP-front
Ø-q-Ø-jə-fa-ʁe] -r
3ABS-DIR-3SG.IO-LOC-fall-PST -ABS
Intended: 'What did I meet the relative who built _ for me?' (Lander 2012:286-287)

Wh-movement can license parasitic gaps (Ershova 2021a).

- ergative trace licenses a parasitic gap in the adjunct clause:

(41) marə [$_{RC}$ č'al-ew$_i$ t_i(ERG) varenje Ø- **zə-** šxə -re
here boy-ADV jam 3ABS- **WH.ERG**- eat -PRES
-r [$_{CP}$ *pro*$_i$(ERG) s^{w}əpə-r Ø- **ə / zə-** mə- wəx -ze]]
-ABS soup-ABS 3ABS- **3SG/WH.ERG**- NEG- finish -CNV
'Here is the boy who is eating jam without finishing the soup.' (Ershova 2021a)

- absolutive trace licenses a parasitic gap in the adjunct clause:

(42) marə [$_{RC}$ pŝaŝ-ew$_i$ [$_{CP}$ [*pro*$_i$ / __$_{PG}$ ə / **zə**-ŝəpχ^w]
here girl-ADV 3SG/**WH.PR**-sister
Ø-me-čəje-fe] t_i(ABS) nəsχape-m **Ø**- Ø- rə-
3ABS-PRES-sleep-LIM doll-OBL **WH.ABS**- 3SG.IO- INS-
ʒeg^{w}ə -re] -r
play -PRES -ABS
'Here is the girl who plays with the doll while her sister sleeps.' (Ershova 2021a)

B Possessor extraction is ungrammatical from all types of applied argument DPs

Experiencer of two-place unaccusative verb: baseline (43a); possessor extraction is ungrammatical (43b); pseudocleft repair strategy (43c).

(43) a. [mə bzəλfəʁe-m(PR) **Ø-**jə-pŝaŝe](IO)
this woman-OBL **WH.PR-**POSS-girl
sə-Ø-š'ə-ʁ^{w}əpša-ʁ
1SG.ABS-3SG.IO-LOC-forget-PST
'This woman's daughter forgot about me.'

b. * mə bzəλfəʁe-r arə [$_{RC}$ Op$_i$ [t_i(PR) **z-**jə-pŝaŝe](IO)
this woman PRED **WH.PR-**POSS-girl
sə-Ø-š'ə-ʁ^{w}əpša-ʁe] -r
1SG.ABS-3SG.IO-LOC-forget-PST -ABS
Intended: 'This woman is the one whose daughter forgot about me.'

c. mə bzəλfəʁe-r arə [$_{RC}$ Op$_i$ [t_i(PR) **z-**jə-pŝaŝe](ABS)
this woman-ABS PRED **WH.PR-**POSS-girl
[$_{RC}$ Op$_j$ t_j(IO) sə-**z-**š'ə-ʁ^{w}əpša-ʁe-r]]
1SG.ABS-**WH.IO-**LOC-forget-PST-ABS
lit. 'This woman is the one whose daughter is the one who forgot about me.'

Indirect object of di-transitive verb: baseline (44a); possessor extraction is ungrammatical (44b); pseudocleft repair strategy (44c).

(44) a. se(ERG) ʒeg^{w}aλe-r(ABS)
I toy-ABS
Ø-Ø-je-s-tə-ʁ [
3ABS-3SG.IO-DAT-1SG.ERG-give-PST
č̣'ele-ç̣ək̆^{w}ə-m(PR) **ə-**š](IO)
boy-small-OBL **3SG.PR-**brother
'I gave the toy to the boy's brother.'

b. * mwarə [$_{RC}$ č̣'ele-c̣ə-ḳ^{w}-ew$_{i}$ [t_{i}(PR) **zə-**š](IO)
here boy-small-ADV **WH.PR-**brother
ʒeg^{w}aλe-r(ABS) Ø-Ø-je-s-tə-ʁe] -r
toy-ABS 3ABS-3SG.IO-DAT-1SG.ERG-give-PST -ABS
Intended: 'Here is the boy to whose brother I gave the toy.'

c. mwarə [$_{RC}$ č̣'ele-c̣ə-ḳ^{w}-ew$_{i}$ [t_{i}(PR) **zə-**š](ABS) [$_{RC}$ Op$_{j}$ t_{j}(IO)
here boy-small-ADV **WH.PR-**brother
ʒeg^{w}aλe-r(ABS) Ø-**z-**e-s-tə-ʁe-r]]
toy-ABS 3ABS-**WH.IO-**DAT-1SG.ERG-give-PST-ABS
lit. 'Here is the boy whose brother is the one to whom I gave the toy.'

High applicative: baseline (45a); possessor extraction is ungrammatical (45b); pseudo-cleft repair strategy (45c).

(45) a. se(ERG) wered(ABS) [mwe ŝ^{w}əzə-m(PR) **Ø-**jə-č̣'ale](IO)
I song this woman-OBL **3SG.PR-**POSS-boy
Ø-qə-Ø-fe-s-ʔ^{w}a-ʁ
3ABS-DIR-3SG.IO-BEN-1SG.ERG-say-PST
'I sang for this woman's son.'

b. * marə [$_{RC}$ ŝ^{w}əz-ew$_{i}$ [t_{i}(PR) **z-**jə-č̣'ale](IO) wered(ABS)
here woman-ADV **WH.PR-**POSS-boy song
Ø-qə-Ø-fe-s-ʔ^{w}a-ʁe] -r
3ABS-DIR-3SG.IO-BEN-1SG.ERG-say-PST -ABS
Intended: 'Here is the woman for whose son I sang.'

c. marə [$_{RC}$ ŝ^{w}əz-ew$_{i}$ [t_{i}(PR) **z-**jə-č̣'ale](ABS) [$_{RC}$ Op$_{j}$ t_{j}(IO)
here woman-ADV **WH.PR-**POSS-boy
Ø-qe-**zə-**fe-s-ʔ^{w}a-ʁe-r]]
3ABS-DIR-**WH.IO-**BEN-1SG.ERG-say-PST-ABS
lit. 'Here is the woman whose son is the one for whom I sang.'

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