

# Three argument hierarchies in West Circassian and how movement can explain them

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# The premise: Contradictory argument hierarchies

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**agent** > **patient/theme/goal/etc.**

(Ershova 2019, 2020, 2021, 2023)

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↪ modular organization of the grammar

E.g. LFG (Dalrymple 1993 a.o.) and HPSG (Pollard and Sag 1994, a.o.).

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**IO** **ABS**  
**I** forgot **myself**.  
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Order of arguments in nominalizations (Ershova 2020):

|             |            |      |
|-------------|------------|------|
| <b>EXP</b>  | <b>TH</b>  | verb |
| * <b>TH</b> | <b>EXP</b> | verb |

# The problem: at least 3 argument hierarchies

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**ABS** > **IO**

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“surface syntax”      **ABS** > **IO**      reciprocals

thematic hierarchy    **IO** > **ABS**      nominalizations

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## Solution

- ▶ No modules, syntax all the way down.
- ▶ Thematic hierarchy = initial syntactic positions of arguments (Baker 1988; Kiparsky 1997; Larson 1988, a.o.).
- ▶ Other hierarchies are derived through movement.

Background on West Circassian

Syntactic ergativity vs. thematic hierarchy

Inverse predicates

The solution

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The solution

**West Circassian** (or Adyghe):

# West Circassian

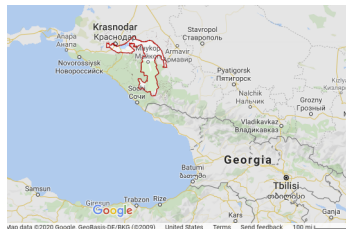
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- ▶ Northwest Caucasian
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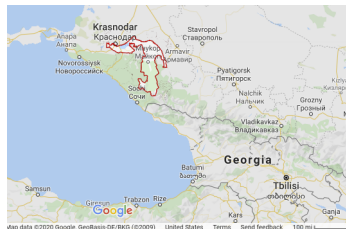




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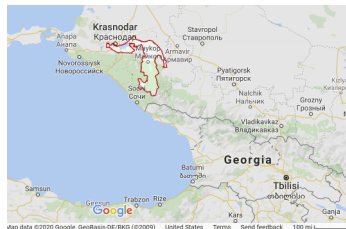
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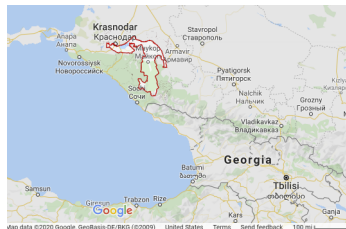
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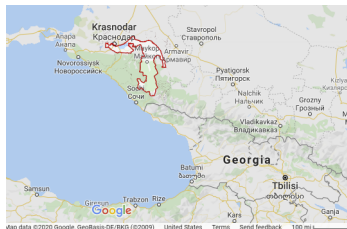


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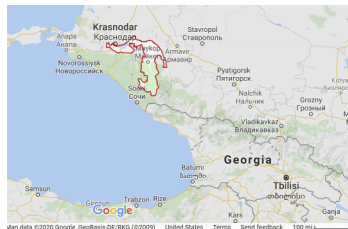
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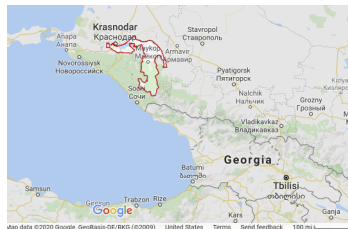
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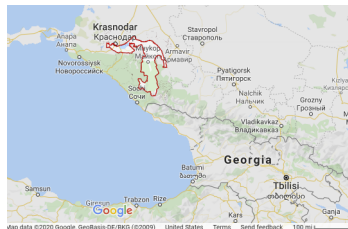
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**Disclaimer:** Glossing and segmentation may be simplified for exposition.

# West Circassian is polysynthetic

Head marking and pro-drop:



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сыкъыпфаригъэлъэгъугъ

*/səqəpfarjəɐləɐ<sup>w</sup>əv/*

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сыкъыпфаригъэлъэгъугъ      /səqəpfarjəvələv<sup>w</sup>əv/

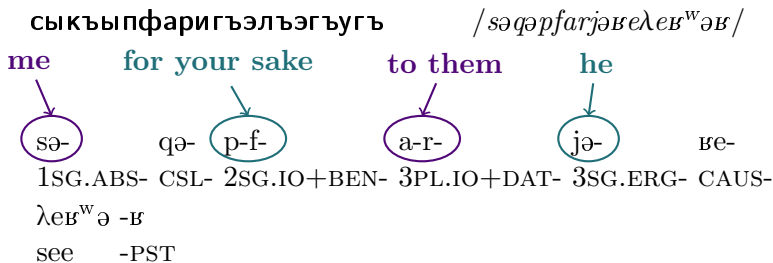
sə-            qə-    p-f-                    a-r-                    jə-            ve-  
1SG.ABS- CSL- 2SG.IO+BEN- 3PL.IO+DAT- 3SG.ERG- CAUS-  
ləv<sup>w</sup>ə -v  
see       -PST

‘He showed me to them for your sake.’

(Korotkova and Lander 2010, 301)

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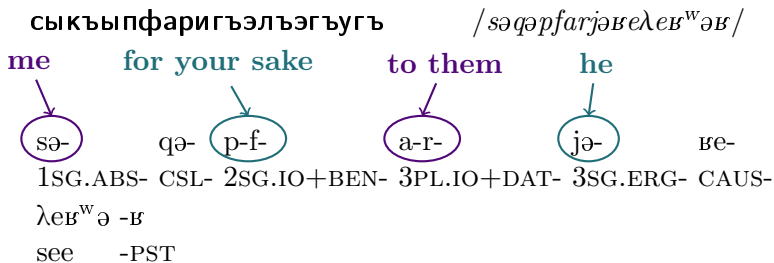


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Order of cross-reference markers:

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me      for your sake      to them      he  
↓      ↓      ↓      ↓  
sə-      qə-      p-f-      a-r-      jə-      βe-  
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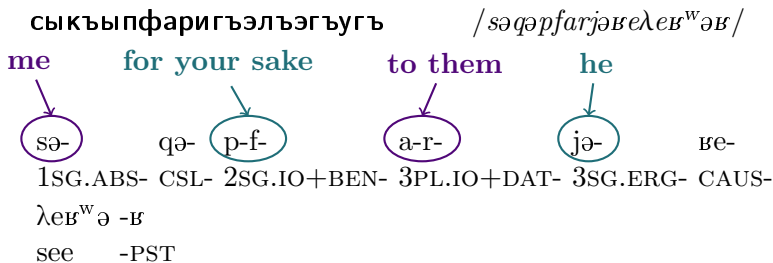
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Order of cross-reference markers:

ABS-      (IO+APPL-)\*      ERG-



# Case marking

**-r (ABS):**

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► S

мы пшъашъэр дахэу къашъо

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

‘This girl dances well.’

## -r (ABS):

► S

► O

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mə pšaše-**r**      daxew qaš<sup>w</sup>e  
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‘This girl dances well.’

сабыйхэм хьахэр къалъэгъугъ

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

‘The children saw the dogs.’

# Case marking

## -r (ABS):

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► O

## -m (OBL):

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# Case marking

## **-r (ABS):**

- ▶ S
- ▶ O

## **-m (OBL):**

- ▶ A

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**сабыйхэм хьахэр къалъэгъугъ**

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this girl-**ABS** well dances

‘This girl dances well.’

## -m (OBL):

- ▶ A
- ▶ applied object (IO)

сабыйхэм хьахэр къалъэгъугъ

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

‘The children saw the dogs.’

мафэ къэс еджап1эм сэк1о

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

‘I go to school every day.’

# Case marking

## -r (ABS):

- ▶ S
- ▶ O

## -m (OBL):

- ▶ A
- ▶ applied object (IO)
- + complements of P

мы пшъашъэр дахэу къашъо

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

‘This girl dances well.’

сабыйхэм хьахэр къалъэгъугъ

sabəjxe-**m** haхе-**r** qaləw<sup>w</sup>əv  
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# Case marking

## -r (ABS):

- S
- O

## -m (OBL):

- A
- applied object (IO)
- + complements of P
- + possessors

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day-each school-**OBL** go

‘I go to school every day.’

# Case marking on possessors

пшъашъэм ипшъэшъэгъу

p̂sâse-**m**    Ø-jə-p̂sêseɣ<sup>w</sup>

girl-**OBL**    3SG.PR-POSS-female.friend

‘the girl’s friend’

# Roadmap

Background on West Circassian

Syntactic ergativity vs. thematic hierarchy

Inverse predicates

The solution

# Reciprocals, reflexives and nominalizations

Diagnostics for argument asymmetries:

Valency type

ERG-ABS

ABS-IO

Reciprocal binding

**ABS** > **ERG**    **ABS** > **IO**

Reflexive binding

**ERG** > **ABS**    **ABS** > **IO**

Linear order in nominalizations

**ERG** > **ABS**    **ABS** > **IO**

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- ▶ With most types of predicates (transitive, bivalent intransitive) two hierarchies are sufficient.

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Linear order in nominalizations

**ERG** > **ABS**    **ABS** > **IO**

- ▶ With most types of predicates (transitive, bivalent intransitive) two hierarchies are sufficient.
- ▶ The picture becomes more complicated with inverse predicates (**TBD**).

# Reciprocal and reflexive morphology

(Ershova 2019, 2023; Letuchiy 2010)

- Specialized morphemes appear in cross-reference slot for bound argument.

(Ershova 2019, 2023; Letuchiy 2010)



# Reciprocal and reflexive morphology

- ▶ Specialized morphemes appear in cross-reference slot for bound argument.
- ▶ Do not affect transitivity: same indexing and case marking as without reciprocal/reflexive. → **Appendix A**

(Ershova 2019, 2023; Letuchiy 2010)

# ABS-IO verbs: ABS binds IO

шъукъыддэшъощт

(Ershova 2023)

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

'You(pl) will dance with us.'

**BASELINE**

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(Ershova 2023)

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'You(pl) will dance with us.'

**BASELINE**

укъыздэшъожъы

wə- qə- z- d- e- š<sup>w</sup>e -ž'ə  
2SG.ABS- CSL- REFL.IO- COM- DYN- dance -RE

'You are dancing with yourself.'

**REFLEXIVE**

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шъукъыддэшъоцт

(Ershova 2023)

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

'You(pl) will dance with us.'

**BASELINE**

тыкъызэдэшъо

tə- qə- ze- d- e- š<sup>w</sup>e  
1PL.ABS- CSL- REC.IO- COM- DYN- dance

'We are dancing with each other.'

**RECIPROCAL**

# ABS-IO verbs: ABS binds IO

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'We are dancing with each other.'

**RECIPROCAL**

+ ERG binds IO (**Appendix B**)

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**RECIPROCAL**

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**Predicted by both hierarchies:**

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**RECIPROCAL**

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tə- qə- ze- d- e- ŝ<sup>w</sup>e  
1PL.ABS- CSL- REC.IO- COM- DYN- dance

'We are dancing with each other.'

**RECIPROCAL**

+ ERG binds IO (**Appendix B**)

**Predicted by both hierarchies:**

Syntactic ergativity: **ABS** > **ERG** > **IO**

Thematic hierarchy: Agent(**ABS/ERG**) > Loc/Ben/Com/etc.(**IO**)



# ERG-ABS verbs: two hierarchies emerge

шъутлъэгъугъ

(Ershova 2023)

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

'We saw you(pl).'

**BASELINE**

# ERG-ABS verbs: two hierarchies emerge

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(Ershova 2023)

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

‘We saw you(pl).’

**BASELINE**

зытлъэгъугъ

$z\text{-}$        $t\text{-}$        $\lambda e\text{B}^w\text{-}$   $\text{-B}$   
**REFL.ABS-** **1PL.ERG-** see      -PST

‘We saw ourselves.’

**REFLEXIVE:** **ERG** > **ABS**

# ERG-ABS verbs: two hierarchies emerge

шъутлъэгъугъ

(Ershova 2023)

ŝ<sup>w</sup>ə-      t-      λeɸ<sup>w</sup>ə -ɸ  
**2PL.ABS- 1PL.ERG-** see      -PST

‘We saw you(pl).’

**BASELINE**

зытлъэгъугъ

zə-      t-      λeɸ<sup>w</sup>ə -ɸ  
**REFL.ABS- 1PL.ERG-** see      -PST

‘We saw ourselves.’

**REFLEXIVE:** ERG > ABS

тэзэрэлъэгъугъ

te-      zere-      λeɸ<sup>w</sup>ə -ɸ  
**1PL.ABS- REC.ERG-** see      -PST

‘We saw each other.’

**RECIPROCAL:** ABS > ERG

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→ **reflexives**

+ **argument encoding in nominalizations**

# Nominalizations: basic structure

(Ershova 2020)

лагъэхэр сэтхьяк1ы

|                        |       |          |      |        |        |
|------------------------|-------|----------|------|--------|--------|
| lavɛ-xɛ-r              | Ø-    | s-       | e-   | thač'ə | FINITE |
| dish-PL-ABS            | 3ABS- | 1SG.ERG- | DYN- | wash   |        |
| 'I am washing dishes.' |       |          |      |        |        |

# Nominalizations: basic structure

(Ershova 2020)

- arguments as possessors or incorporated

лагъэхэр сэтхьак1ы

|                        |       |          |      |        |               |
|------------------------|-------|----------|------|--------|---------------|
| lavɛ-xɛ-r              | Ø-    | s-       | e-   | thač'ə | <b>FINITE</b> |
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лагъэхэр сэтхьак1ы

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

уилэгъэ тхьак1ык1э

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

# Nominalizations: basic structure

(Ershova 2020)

- ▶ arguments as possessors or incorporated
- ▶ no verbal cross-reference marking

лагъэхэр сэтхьяк1ы

laɤe-xe-r    Ø-    s-    e-    thač'ə    **FINITE**  
dish-PL-ABS    3ABS-    1SG.ERG-    DYN-    wash  
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- ▶ arguments as possessors or incorporated
- ▶ no verbal cross-reference marking → possessor indexing

лагъэхэр сэтхьяк1ы

|                        |       |          |      |        |        |
|------------------------|-------|----------|------|--------|--------|
| laɤe-xe-r              | Ø-    | s-       | e-   | thač'ə | FINITE |
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| 'I am washing dishes.' |       |          |      |        |        |

уилэгъэ тхьяк1ык1э

|                                 |       |        |      |                |
|---------------------------------|-------|--------|------|----------------|
| wjə-                            | leɤe- | thač'ə | -č'e | NOMINALIZATION |
| 2SG.POSS-                       | dish- | wash   | -NML |                |
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# Argument encoding in nominalizations

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Arguments are strictly ordered in accordance with the thematic hierarchy:

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**Agent      Theme/Goal/Location...      Verb+NML**

(Ershova 2020)

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| <u>Valency class</u> | <b>Agent</b> | <b>Theme/Goal/Location...</b> | <b>Verb+NML</b> |
|----------------------|--------------|-------------------------------|-----------------|
| ERG-ABS:             | ERG          | > ABS                         |                 |

(Ershova 2020)

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|----------------------|--------------|---|-------------------------------|---------------------|
| ERG-ABS:             | ERG          | > | ABS                           |                     |
| ABS-IO:              | ABS          | > | IO                            | <b>(Appendix C)</b> |

(Ershova 2020)

# ERG Agent appears farther from root than ABS theme

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мы пшъашъэм лагъэхэр етхьак1ы

mə pšaše-m(ERG) laʁe-xe-r(ABS) Ø-j-e-thač'ə

this girl-ABS dish-PL-ABS 3ABS-3SG.ERG-DYN-wash

'This girl is washing the dishes.'

# ERG Agent appears farther from root than ABS theme

мы пшъашъэм лагъэхэр етхъак1ы

mə p̄sâê-m(ERG) laɤe-xe-r(ABS) Ø-j-e-thač'ə

this girl-ABS dish-PL-ABS 3ABS-3SG.ERG-DYN-wash

'This girl is washing the dishes.'

пшъэшъэ лэгъэ тхъак1ык1эр

ERG- ABS-

✓ p̄sêê- leɤe- thač'ə -č'e -r  
girl- dish- wash -NML -ABS

'the girls' manner of dish-washing' (Ershova 2020, 461-462)

# ERG Agent appears farther from root than ABS theme

мы пшъашъэм лагъэхэр етхъак1ы

mə p̄sāše-m(**ERG**) laɣe-xe-r(**ABS**) Ø-j-e-thač'ə  
this girl-ABS dish-PL-ABS 3ABS-3SG.ERG-DYN-wash  
'This girl is washing the dishes.'

пшъэшъэ лэгъэ тхъак1ык1эр  
#лэгъэ пшъэшъэ тхъак1ык1эр

**ERG- ABS-**

✓ p̄sēše- leɣe- thač'ə -č'e -r  
girl- dish- wash -NML -ABS

**ABS- ERG-**

# leɣe- p̄sēše- thač'ə -č'e -r  
dish- girl- wash -NML ABS

'the girls' manner of dish-washing' (Ershova 2020, 461-462)



# ERG Agent appears farther from root than ABS theme

мы пшъашъэм лагъэхэр етхъак1ы

mə p̄sâše-m(**ERG**) laɣe-xe-r(**ABS**) Ø-j-e-thač'ə

this girl-ABS dish-PL-ABS 3ABS-3SG.ERG-DYN-wash

'This girl is washing the dishes.'

пшъэшъэ лэгъэ тхъак1ык1эр

#лэгъэ пшъэшъэ тхъак1ык1эр

**ERG- ABS-**

✓ **p̄sêše- leɣe-** thač'ə -č'e -r  
**girl- dish-** wash -NML -ABS

**ABS- ERG-**

# **leɣe- p̄sêše-** thač'ə -č'e -r  
**dish- girl-** wash -NML ABS

'the girls' manner of dish-washing' (Ershova 2020, 461-462)

ERG-ABS verb:  
Order of arguments

**ERG-ABS-Root**

\* **ABS-ERG-Root**

# Syntactic ergativity vs. thematic hierarchy: summary

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... except not quite.

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Grammatical rules in West Circassian are sensitive to two different argument hierarchies:

1. Syntactic ergativity: **ABS** > **ERG** > **IO**

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2. Thematic hierarchy:

Agent(**ABS**/**ERG**) > Ben/Loc/Com(**IO**), Theme(**ABS**)

→ **reflexives**

→ **argument encoding in nominalizations**

... except not quite.

→ **inverse verbs**

# Roadmap

Background on West Circassian

Syntactic ergativity vs. thematic hierarchy

Inverse predicates

The solution

# The problem for the thematic hierarchy

**Inverse verbs:** **IO** experiencer/possessor + **ABS** theme

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**Inverse verbs:** **IO** experiencer/possessor + **ABS** theme

сыпщыгъупшагъ

Theme    Exp

sə-            p-            š'ə-    ɸ<sup>w</sup>əpša -ɸ

**1SG.ABS-** **2SG.IO-** LOC- forget    -PST

'You forgot about me.'

# The problem for the thematic hierarchy

**Inverse verbs:** **IO** experiencer/possessor + **ABS** theme

сыпщыгъупшагъ

Theme    Exp

sə-            p-            š'ə-    Ɂ<sup>w</sup>əpša -Ɂ

**1SG.ABS-** **2SG.IO-** LOC- forget    -PST

'You forgot about me.'

**Three hierarchies:**

# The problem for the thematic hierarchy

**Inverse verbs:** **IO** experiencer/possessor + **ABS** theme

сыпщыгъупшагъ

Theme    Exp

**sə-**            **p-**            š'ə-    ɸ<sup>w</sup>əpša -ɸ

**1SG.ABS-** **2SG.IO-** LOC- forget    -PST

'You forgot about me.'

**Three hierarchies:**

Reciprocals:            **ABS** > **IO**            syntactic ergativity /  
                                  **(Appendix D)**            "surface subjecthood"

# The problem for the thematic hierarchy

**Inverse verbs:** **IO** experiencer/possessor + **ABS** theme

сыпщыгъупшагъ

Theme    Exp

**sə-**            **p-**            š'ə-    Ɂ<sup>w</sup>əpša -Ɂ

**1SG.ABS-** **2SG.IO-** LOC- forget    -PST

'You forgot about me.'

**Three hierarchies:**

Reciprocals:            **ABS** > **IO**            syntactic ergativity /  
                                  **(Appendix D)**            "surface subjecthood"

Nominalizations:    **IO** > **ABS**            thematic hierarchy



# The problem for the thematic hierarchy

**Inverse verbs:** **IO** experiencer/possessor + **ABS** theme

сыпщыгъупшагъ

Theme    Exp

**sə-**            **p-**            š'ə-    Ɂ<sup>w</sup>əpša -Ɂ

**1SG.ABS-** **2SG.IO-** LOC- forget    -PST

'You forgot about me.'

**Three hierarchies:**

Reciprocals:            **ABS** > **IO**            syntactic ergativity /  
                                  **(Appendix D)**            "surface subjecthood"

Reflexives:            **ABS** = **IO**            ???

Nominalizations:    **IO** > **ABS**            thematic hierarchy

# Nominalizations: IO > ABS

(Ershova 2020)

Theme    Exp

sə-            p-            š'ə-    b<sup>w</sup>əpša -b  
1SG.ABS- 2SG.IO- LOC- forget -PST

'You forgot about me.'

# Nominalizations: IO > ABS

(Ershova 2020)

Theme Exp

sə- p- š'ə- ɞ<sup>w</sup>əpša -ɞ  
1SG.ABS- 2SG.IO- LOC- forget -PST

'You forgot about me.'

к1алэм инэнэщыгъупшэн

č'ale-m jə- nene- š'ə- ɞ<sup>w</sup>əpše -n  
boy-OBL 3SG.POSS- grandmother- LOC- forget -NML

(Ershova 2020)

Theme Exp

sə- p- š'ə- ɞ<sup>w</sup>əpša -ɞ  
**1SG.ABS- 2SG.IO-** LOC- forget -PST

'You forgot about me.'

к1алэм инэнэцыгъупшэн

**EXP(IO)** **THEME(ABS)**

č'ale-m jə- nene- š'ə- ɞ<sup>w</sup>əpše -n  
**boy-OBL 3SG.POSS- grandmother-** LOC- forget -NML

'the boy's forgetting grandmothers'

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**EXP(IO)** **THEME(ABS)**

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**boy-OBL 3SG.POSS- grandmother-** LOC- forget -NML

'the boy's forgetting grandmothers'

\* 'grandmothers' forgetting the boy'

\* **THEME(ABS)** **EXP(IO)**

сыпщыгъупшагъ

**BASELINE**

Theme    Exp

sə-            p-            š'ə-    ɸ<sup>w</sup>əpša -ɸ

**1SG.ABS-** **2SG.IO-** LOC- forget    -PST

'You forgot about me.'

(Ershova 2023)

сыпщыгъупшагъ

BASELINE

Theme Exp

sə- p- š'ə- ɸ<sup>w</sup>əpša -ɸ  
1SG.ABS- 2SG.IO- LOC- forget -PST

'You forgot about me.'

'I forgot about myself.'

(Ershova 2023)

сыпщыгъупшагъ

**BASELINE**

Theme Exp

sə- p- š'ə- ɸ<sup>w</sup>əpša -ɸ

**1SG.ABS- 2SG.IO-** LOC- forget -PST

'You forgot about me.'

зысщыгъупшэжъыгъ

**REFLEXIVE: IO > ABS**

zə- s- š'ə- ɸ<sup>w</sup>əpše -ž'ə -ɸ

**REFL.ABS- 1SG.IO-** LOC- forget -RE -PST

'I forgot about myself.'

(Ershova 2023)



сыпщыгъупшагъ

**BASELINE**

Theme Exp

sə- p- š'ə- ɞ<sup>w</sup>əpša -ɞ  
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zə- s- š'ə- ɞ<sup>w</sup>əpše -ž'ə -ɞ  
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сызщыгъупшэжъыгъ

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**1SG.ABS- REFL.IO-** LOC- forget -RE -PST

'I forgot about myself.'

(Ershova 2023)

# Inverse verbs: the takeaway

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## The problem:

- ▶ Not expected based on any thematic hierarchy.
- ▶ Contrast with argument order in nominalizations:

EXPERIENCER > THEME → as expected!

# Roadmap

Background on West Circassian

Syntactic ergativity vs. thematic hierarchy

Inverse predicates

The solution

# The solution in a nutshell

# The solution in a nutshell

- ▶ No modularly defined hierarchies.

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- ▶ Additional ingredient: **ABS argument moves twice.**

# The solution in a nutshell

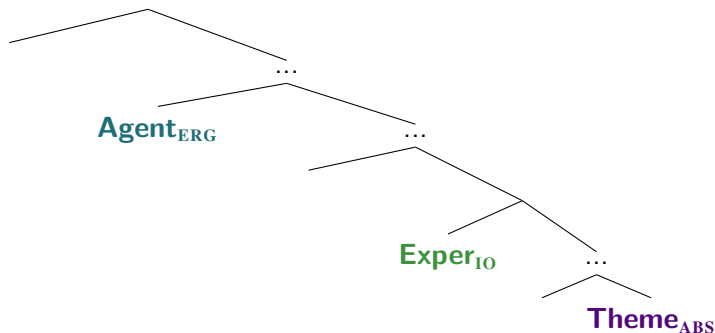
- ▶ No modularly defined hierarchies.
  - They won't work anyway!
- ▶ Argument hierarchy = relative positions in a tree.
- ▶ Additional ingredient: **ABS argument moves twice.**

**Result:** All 3 hierarchies can be captured with 1 tree.



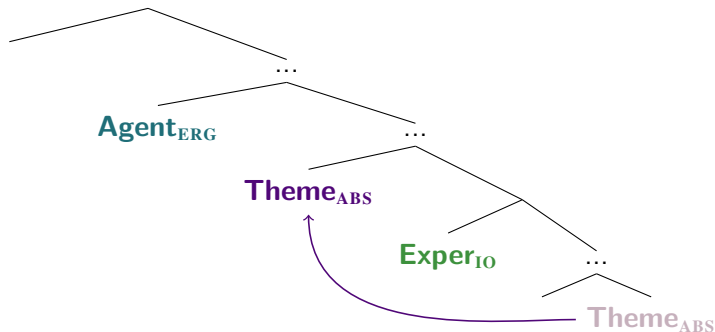
# A movement-based solution

1. thematic hierarchy    **ERG** > **IO** > **ABS**    (nominalizations)



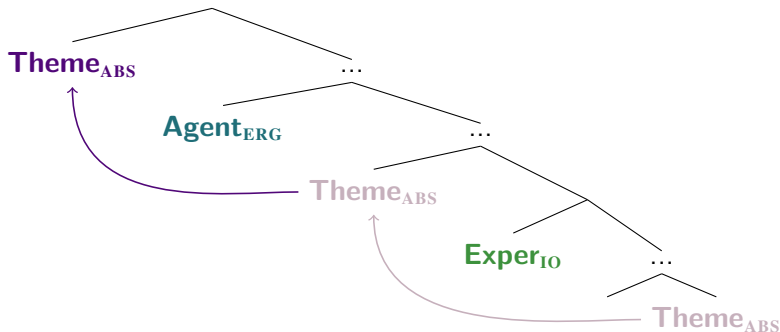
# A movement-based solution

1. thematic hierarchy    **ERG** > **IO** > **ABS**    (nominalizations)
2. ABS movement #1    **ERG** > **ABS** = **IO**    (reflexives)



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1. thematic hierarchy    **ERG** > **IO** > **ABS**    (nominalizations)
2. ABS movement #1    **ERG** > **ABS** = **IO**    (reflexives)
3. ABS movement #2    **ABS** > **ERG** > **IO**    (reciprocals)



# Correct predictions

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- ▶ ... for reciprocals, reflexives, and nominalizations.

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**Agent**<sub>ERG</sub> > **Experiencer/Location/Goal**<sub>IO</sub>

- ▶ ... for reciprocals, reflexives, and nominalizations.
- ▶ Follows directly from movement-based explanation:

**ERG** and **IO** don't move, so their relative positions remain constant throughout the derivation.

# Thank you

тхъашъуегъэпсэу!

tha- š<sup>w</sup>- j- e- be- psew  
god- 2PL.ABS- 3SG.ERG- DYN- CAUS- live

lit. 'May God let you live!'

Thanks to:

- ▶ West Circassian consultants: Svetlana K. Alishaeva, Saida Gisheva, Susana K. Khatkova, and Zarema Meretukova
- ▶ This talk builds on analyses and data from Ershova 2019, 2020, 2023. See acknowledgements there.

- Arkadiev, P.M. et al. (2009). "Vvedeniye. Osnovnyye svedeniya ob adygejskom jazyke [Introduction: Basic information on Adyghe]". In: **Aspekty polisintetizma: Očerki po grammatike adygejskogo jazyka**. Ed. by Ya. G. Testelets. RGGU, 17–120.
- Baker, Mark C. (1988). **Incorporation. A Theory of Grammatical Function Changing**. Chicago/London: University of Chicago Press.
- Dalrymple, Mary (1993). **The syntax of anaphoric binding**. CSLI Publications.
- Ershova, Ksenia (2019). "Syntactic ergativity in West Circassian". PhD thesis. University of Chicago.
- (2020). "Two paths to polysynthesis: Evidence from West Circassian nominalizations". In: **Natural Language and Linguistic Theory** 38, 425–475. DOI: 10.1007/s11049-019-09455-w.
  - (2021). "Diagnosing Clause Structure in a Polysynthetic Language: Wh-Agreement and Parasitic Gaps in West Circassian". In: **Linguistic Inquiry** 52.1, 1–38. DOI: 10.1162/ling\_a\_00371.
  - (2023). "Syntactic ergativity and the theory of subjecthood: Evidence from anaphor binding in West Circassian". In: **Language** 99.2, 193–241. DOI: 10.1353/lan.2023.a900086.
- Fillmore, C.J. (1968). "The case for Case". In: **Universals in linguistic theory**. Ed. by E. Bach and R.T. Harms. Holt, Rinehart, and Winston, 1–88.
- (1971). "Some problems for Case Grammar". In: **Report of the 22nd Annual Roundtable Meeting on Linguistics and Language Studies**. Ed. by R.J. O'Brien. Georgetown University Press, 35–56.

# References (cont.)

- Grimshaw, J. (1990). **Argument structure**. MIT Press.
- Kiparsky, Paul (1997). **Remarks on denominal verbs**. Ed. by A. Alsina, J. Bresnan, and P. Sells.
- Korotkova, Natalia and Yury Lander (2010). "Deriving affix ordering in polysynthesis: Evidence from Adyghe". In: **Morphology** 20, 299–319.
- Larson, Richard K (1988). "On the Double Object Construction". In: **Linguistic Inquiry** 19.3, 335–391.
- Letuchiy, Alexander (2010). "Ergativity in the Adyghe system of valency-changing derivations". In: **Ergativity, Valency and Voice**. Ed. by Gilles Authier and Katharina Haude. De Gruyter, 323–353.
- Pollard, Carl and Ivan A. Sag (1994). **Head-driven phrase structure grammar**. University of Chicago Press.
- Rogava, G.V. and Z.I. Keraševa (1966). **Grammatika adygjskogo jazyka [The grammar of Adyghe]**. Krasnodarskoe knižnoe isdatelstvo.
- Smeets, Henricus Joannes (1992). "On valencies, actants and actant coding in Circassian". In: **Caucasian perspectives**. Ed. by George Hewitt. LINCOM EUROPA, 98–144.
- Van Valin, R.D., Jr. (1990). "Semantic parameters of split intransitivity". In: **Language** 66.2, 221–260.

# Reciprocal agreement does not affect transitivity



# Reciprocal agreement does not affect transitivity

ERG binds IO

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**ERG** binds **IO**

- REC replaces IO agreement

ахэмэ 1эгубжъэр зэратыжыы

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

‘They pass the cup to each other.’

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

# Reciprocal agreement does not affect transitivity

**ERG** binds **IO**

- ▶ REC replaces IO agreement
- ▶ ERG antecedent bears ERG case

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сабыйхэр зэплъыжых

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

‘The children are looking at each other.’

# Reciprocal agreement does not affect transitivity

**ABS** binds **IO**

- ▶ REC replaces IO agreement
- ▶ ABS antecedent bears ABS case

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# ABS Agent appears farther from root than IO

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мы пшъашъэр хьак1эмэ яжэ

mə p̄sāše-r(**ABS**) haç'e-me(**IO**) Ø-ja-že

this girl-ABS            guest-PL.OBL    3ABS-3PL.IO+DAT-wait

'This girl is waiting for guests.'



# ABS Agent appears farther from root than IO

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mə p̄šaše-r(ABS) hač'e-me(IO) Ø-ja-že

this girl-ABS guest-PL.OBL 3ABS-3PL.IO+DAT-wait

'This girl is waiting for guests.'

хак1эмэ япшъэшъэ ежап1э

hač'e-me(ABS) ja-p̄šeše(IO)-je-ža-pe

guest-PL.OBL 3PL.POSS-girl-DAT-wait-NML

'the place for the guests' waiting for the girl'

not: \*'the place for the girls' waiting for the guests' (Ershova 2020, 463)

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ABS-IO verb: Order of arguments

AGENT(ABS) – IO – Root

\* IO – AGENT(ABS) – Root

унэ фэсш1ыгъ

wəne Ø- Ø- fe- s- šə -B  
house 3ABS- **3SG.IO-** BEN- **1SG.ERG-** do -PST

'I built a house for him/her.'

**BASELINE**

# ERG-IO-ABS verbs: ERG binds IO

унэ фэсш1ыгъ

wəne Ø- Ø- fe- s- šə -ʋ  
 house 3ABS- **3SG.IO-** BEN- **1SG.ERG-** do -PST

'I built a house for him/her.'

**BASELINE**

о унэр зыфэпш1ыжъыгъ

we wəne-r Ø- zə- fe- p- šə -ž'ə -ʋ  
 you house-ABS 3ABS- **REFL.IO-** BEN- **2SG.ERG-** do -RE -PST

'You built a house for yourself.'

**REFLEXIVE**

# ERG-IO-ABS verbs: ERG binds IO

унэ фэсш1ыгъ

wəne Ø- Ø- fe- s- šə -ʋ  
house 3ABS- **3SG.IO-** BEN- **1SG.ERG-** do -PST

'I built a house for him/her.'

**BASELINE**

тэ унэхэр зэфэтш1ыжбыгъ

te wəne-xe-r Ø- ze- fe- t- šə -ž'ə -ʋ  
we house-PL-ABS 3ABS- **REC.IO-** BEN- **1PL.ERG-** do -RE -PST

'We built houses for each other.'

**RECIPROCAL**

сыпщыгъупшагъ

BASELINE

Theme Exp

sə- p- š'ə- ɞ<sup>w</sup>əpša -ɞ  
1SG.ABS- 2SG.IO- LOC- forget -PST

'You forgot about me.'

# Reciprocals: ABS > IO

сыпщыгъупшагъ

BASELINE

Theme Exp

sə- p- š'ə- ɞ<sup>w</sup>əpša -ɞ  
1SG.ABS- 2SG.IO- LOC- forget -PST

'You forgot about me.'

тызэщыгъупшэжъыгъ

RECIPROCAL: ABS > IO

tə- ze- š'ə- ɞ<sup>w</sup>əpše -ž'ə -ɞ  
1PL.ABS- REC.IO- LOC- forget -RE -PST

'We forgot about each other.'

# Reciprocals: ABS > IO

сыпщыгъупшагъ

BASELINE

Theme Exp

sə- p- š'ə- ɞ<sup>w</sup>əpša -ɞ  
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'You forgot about me.'

тызэщыгъупшэжъыгъ

RECIPROCAL: ABS > IO

tə- ze- š'ə- ɞ<sup>w</sup>əpše -ž'ə -ɞ  
1PL.ABS- REC.IO- LOC- forget -RE -PST

\* зэтщыгъупшэжъыгъ

RECIPROCAL: \* IO > ABS

\* ze- t- š'ə- ɞ<sup>w</sup>əpše -ž'ə -ɞ  
REC.ABS- 1PL.IO- LOC- forget -RE -PST

'We forgot about each other.'